

AMERICAN BEE JOURNAL



APIARIES OF M. H. MENDLESON, OF VENTURA COUNTY, CAL.—(See page 295.)
(One of the Largest Bee-Keeper in the Golden State.)

American Bee Journal



PUBLISHED MONTHLY BY
GEORGE W. YORK & COMPANY
 118 W. Jackson Blvd., Chicago, Ill.

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Objects of the Association.

- 1st.—To promote the interests of its members.
- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

Annual Membership Dues, \$1.00.

General Manager and Treasurer—
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Bee-Keepers' National Convention,

Detroit, October 13-15

Transportation Arrangements via Michigan Central "Niagara Falls Route"

Six trains daily Chicago to Detroit as follows:

GOING

| | | | | | | | |
|-------------|------------|-----------|------------|------------|------------|------------|------------|
| LV. CHICAGO | *7:10 a.m. | 8:45 a.m. | 10:30 a.m. | 3:00 p.m. | 5:00 p.m. | 10:00 p.m. | 11:55 p.m. |
| AR. DETROIT | 5:20 p.m. | 3:30 p.m. | 5:55 p.m. | 10:30 p.m. | 11:53 p.m. | 7:15 a.m. | 9:20 a.m. |

RETURNING

| | | | | | | |
|-------------|-----------|------------|-----------|-----------|-----------|-----------|
| LV. DETROIT | 7:00 a.m. | *7:10 a.m. | 8:25 a.m. | 1:40 p.m. | 9:15 p.m. | 1:20 a.m. |
| AR. CHICAGO | 2:55 p.m. | 6:05 p.m. | 3:30 p.m. | 9:10 p.m. | 7:30 a.m. | 8:45 a.m. |

Also numerous trains from the east via N. Y. Central and Michigan Central as follows:

| | | | | | |
|--------------|------------|-----------|--|------------|------------|
| LV. NEW Y'K | 12:50 p.m. | 4:30 p.m. | 6:00 p.m. or 8:00 p.m. | 11:20 p.m. | 8:45 a.m. |
| LV. BOSTON | 10:00 a.m. | 1:45 p.m. | 4:45 p.m. | 7:35 p.m. | |
| LV. ALBANY | 4:15 p.m. | 8:00 p.m. | 10:00 p.m. or 10:45 p.m. or 11:40 p.m. | 3:15 a.m. | 12:10 noon |
| LV. BUFFALO | 11:50 p.m. | 3:25 a.m. | 7:45 a.m. | 2:00 p.m. | 8:25 p.m. |
| LV. N. FALLS | | | | 8:25 a.m. | 2:42 p.m. |
| AR. DETROIT | 6:20 a.m. | 8:15 a.m. | | 1:30 p.m. | 8:50 p.m. |

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American Bee Journal

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Mention Bee Journal when writing.

Italian and Caucasian BEES, QUEENS and NUCLEI



Choice home-bred and Imported stock. All queens reared in full colonies.

Prices for July and After

| | |
|-----------------------------|-------|
| One Untested Queen | \$.75 |
| One Tested Queen | .90 |
| One Select Tested Queen | 1.10 |
| One Breeder Queen | 1.45 |
| One Club Nucleus (no queen) | .80 |
| One Tested Caucasian Queen | 1.10 |

Safe arrival guaranteed. For prices on larger quantities and description of each grade of queens, send for price list.

All queens by return mail. A few hundred pounds of Comb Foundation. Send for sample and price.

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Not Cheap Queens, But Queens Cheap.

Bred from the very best selected strain. Guaranteed to work any flower.

Italian Bees Work or Money Refunded

Untested Italian queens in lots as follows:
One, 75 cents; Six, \$4.20; Twelve, \$7.80.
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Nuclei with untested Italian queen:
One fr., \$1.75; Two fr., \$2.25; Full Col. \$4.75.
Nuclei with tested Italian queen:
One fr., \$2.00; Two fr., \$2.50; Full Col. \$5.00.

The above queens are all reared from the very best selected red clover Italian queens. Orders filled by return mail. Dealer in Bee-keepers' Supplies.

W. J. Littlefield, R. F. D. No. 3 Little Rock, Ark.

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QUEENS

of the Robey strain of three-banded Italians during the season of 1908. Warranted queens, 75c each; \$4.25 per six; \$8.00 per doz. Tested queens, \$1. Satisfaction or money refunded.

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Our specialty is making Sections. All other goods up-to-date.

AUG. LOTZ & SON, Cadott, Wis.

10A34t Please mention the Bee Journal.

We are Now Booking Queen-Orders for 1909

\$4.00 for 6 queens; \$2.10 for 3; or 75c for

A Standard-Bred Italian Queen-Bee



For a number of years we have been sending out to bee-keepers exceptionally fine Untested Italian Queens, purely mated, and all right in every respect. Here is what a few of those who received our Queens have to say about them:

What They Say of Our Queens

GEORGE W. YORK & CO.:—The two queens received of you some time ago are fine. They are good breeders, and the workers are showing up fine. I introduced them among black bees, and the bees are nearly yellow now, and are doing good work.
Nemaha, Co., Kan., July 15, 1905.

GEORGE W. YORK & CO.:—After importing queens for 15 years you have sent me the best. She keeps 9x Langstroth frames fully occupied to date, and, although I kept the hive well contracted, to force them to swarm, they have never built a queen-cell, and will put up 100 pounds of honey if the flow lasts this week.
Ontario, Canada, July 22, 1905.

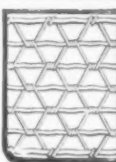
GEORGE W. YORK & CO.:—The queen I bought of you has proven a good one, and has given me some of my best colonies.
Washington Co., Va., July 22, 1905.

GEORGE W. YORK & CO.:—The queen I received of you a few days ago came through O.K., and I want to say that she is a beauty. I immediately introduced her into a colony which had been queenless for 20 days. She was accepted by them, and has gone to work nicely. I am highly pleased with her and your promptness in filling my order. My father, who is an old bee-keeper, pronounced her very fine. You will hear from me again when I am in need of something in the bee-line.
Marion Co., Ill., July 13.



We usually begin mailing Queens in May, and continue thereafter, on the plan of "first come first served." The price of one of our Untested Queens alone is 75 cents, or with the monthly American Bee Journal one year—both for \$1.20. Three Queens (without Journal) would be \$2.10, or 6 for \$4.00. Full instructions for introducing are sent with each Queen, being printed on the underside of the address-card on the mailing-envelope. You cannot do better than to get one or more of our fine Standard-Bred Queens.

Address, **GEORGE W. YORK & CO., 118 W. Jackson, Chicago, Ill.**



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Made of High Carbon Double Strength Coiled Wire. Heavily Galvanized to prevent rust. Have no agents. Sell at factory prices on 30 days' free trial. We pay all freight. 37 heights of farm and poultry fence. Catalog Free.

COILED SPRING FENCE CO.
Box 89 Winchester, Indiana.

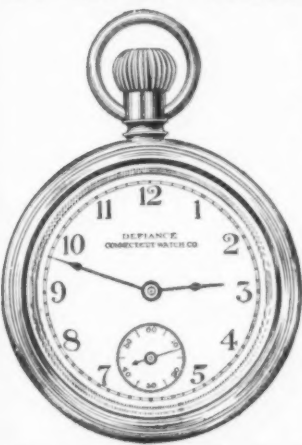
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FIVE ACRES

ONLY \$1,000.00
Choice Chicago Suburban property at Winfield, Du Page Co., Ill., 27 miles west, C. & N. W. Ry.; low commutation rates; 50 minute ride. Tracts One Acre and up. Fine garden, fruit and timber land. River frontage. All near depot. Just the place for chickens, squabs, mushrooms, bees, gardens and homes. \$2 Send for folder.

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This watch is stem wind and pendant set. It is made to meet the popular demand for an accurate timekeeper at a low cost.

It is open face, heavy beveled crystal. Bezel snaps on. Lantern pinions, American lever escapement, polished spring encased in barrel. Short wind and long run—30 to 35 hours in one winding. The manufacturers give the following warranty:

1. To be in perfect running condition when it leaves the factory.
2. To be correct in material and workmanship.
3. Repairs will be made, not necessitated by carelessness or abuse, during one year from date watch is bought, if it is returned to them with 5 cents enclosed for return postage.

An Easy Way to Get This Watch Free

Send us 4 new subscribers to the American Bee Journal at 75 cents each, and we will mail you this Watch free as a premium. Or, we will mail it with the American Bee Journal one year—both for only \$1.60. Or, send us \$1.10 and we will mail you the Watch alone.

Every boy and girl can now own a good watch. It would be a very nice and useful gift for a friend or relative. Address

George W. York & Co., 118 W. Jackson Boulevard, Chicago, Illinois

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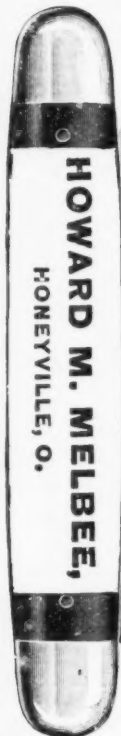
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Sample copies free to help you interest your friends and get subscriptions. If you will send us names of your neighbors or friends we will mail them sample copies free. After they have received their copies, with a little talk, you can get some to subscribe and so either get your own subscription free or receive some of the useful premiums below. They're worth getting. We give you a year's subscription free for sending us two new subscriptions at 75 cents each.

BEE-KEEPERS' NOVELTY POCKET-KNIFE

Your name and address put on one side of the handle as shown in cut, and on the other side pictures of a queen-bee, a worker, and a drone. The handle is celluloid and transparent, through which is seen your name. If you lose this knife it can be returned to you, or serves to identify you if you happen to be injured fatally, or are unconscious. Cut is exact size. Be sure to write exact name and address. Knife delivered in two weeks. Price of knife alone, postpaid, \$1.25. With a year's subscription, \$1.75. Free for 4 new 75c subscriptions.



BEE-KEEPERS' GOLD-NIB FOUNTAIN PEN

A really good pen. As far as true usefulness goes is equal to any any of the higher-priced, much-advertised pens. If you pay more it's name you're charged for. The Gold Nib is guaranteed 14 Karat gold-iridium pointed. The holder is hard rubber, handsomely finished. The cover fits snugly, and can't slip off because it slightly wedges over the barrel at either end. This pen is non-leakable. It is very easily cleaned, the pen-point and feeder being quickly removed. The simple feeder gives a uniform supply of ink to the pen-point without dripping, blotting or spotting. Every bee-keeper ought to carry one in his vest-pocket. Comes in box with directions and filler. Each pen guaranteed. Here shown two-thirds actual size.

Price alone, postpaid, \$1.25. With a year's subscription, \$1.75. Given free for 4 new subscriptions at 75 cents each.

MONETTE QUEEN-CLIPPING DEVICE

The Monette Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. Four and one-half inches high. It is used by many bee-keepers. Full printed directions sent with each one. Price alone, postpaid, 25 cents. With a year's subscription, 90 cents. Given free for sending one new subscription at 75 cents.



Size.

IDEAL HIVE-TOOL

A special tool invented by a Minnesota bee-keeper, adapted for prying up supers and for general work around the apiary. Made of malleable iron, 8 1/4 inches long. The middle part is 1 1/16 inches wide and 7/32 thick. The smaller end is 1 1/4 inches long, 1/2 inch wide, and 7/32 thick, ending like a screw-driver. The larger end is wedge-shaped having a sharp, semi-circular edge, making it almost perfect for prying up covers, supers, etc., as it does not mar the wood. Dr. Miller, who has used it since 1903 says, Jan. 7, 1907: "I think as much of the tool as ever."

Price alone, postpaid, 40 cents. With a year's subscription, \$1.00. Given free for 2 new subscriptions at 75c each.



Exactly half actual size.

PREMIUM QUEENS

These are untested, standard-bred Italian Queens, reports of which have been highly satisfactory. They are active breeders, and produce good workers.

Sent only after May 1st. Orders booked any time



for queens. Safe delivery guaranteed. Price, 75 cents each, 6 for \$4.00, or 12 for \$7.50. One queen with a year's subscription, \$1.20. Queen free for 3 new 75c subscriptions.

HUMOROUS BEE POST-CARDS



A "Teddy Bear" on good terms with everybody, including the bees swarming out of the old-fashioned "skep." Size 3 1/4 x 5 1/2, printed in four colors. Blank space 1 1/4 x 3 inches for writing. Prices—3 postpaid, 10 cents; 10 for 25 cents. Ten with a year's subscription, 90 cents. Six given free for one new 75c subscription.

BOOKS FOR BEE-KEEPERS

Forty Years Among the Bees, by Dr. C. C. Miller.—334 pages, bound in handsome cloth, with gold letters and design, illustrated with 112 beautiful half-tone pictures, taken by Dr. Miller. It is a good, new story of successful bee-keeping by one of the masters, and shows in minutest detail just how Dr. Miller does things with bees. Price alone, \$1.00. With a year's subscription, \$1.50. Given free for 3 new subscriptions at 75 cents each.

Advanced Bee-Culture, by W. Z. Hutchinson.—The author is a practical and helpful writer. 330 pages; bound in cloth, beautifully illustrated. Price alone, \$1.30. With a year's subscription, \$1.70. Given free for 4 new subscriptions at 75 cents each.

ABC & XYZ of Bee Culture, by A. I. & E. R. Root.—Over 500 pages describing everything pertaining to the care of honey-bees. 400 engravings. Bound in cloth, price alone, \$1.50. With a year's subscription, \$2.00. Given free for 6 new subscriptions at 75 cents each.

Scientific Queen-Rearing, as Practically Applied, by G. M. Doolittle.—How the very best queens are reared. Bound in cloth and illustrated. Price alone, \$1.00. With a year's subscription, \$1.50. Given free for 4 new subscriptions at 75 cents each. In leatherette binding, price alone, 75 cents. With a year's subscription, \$1.25. Given free for 2 new subscriptions at 75 cents each.

Bee-Keeper's Guide, or Manual of the Apiary, by Prof. A. J. Cook.—This book is instructive, helpful, interesting, thoroughly practical and scientific. It also contains anatomy and physiology of bees. 544 pages, 295 illustrations. Bound in cloth. Price alone, \$1.20. With a year's subscription, \$1.70. Given free for 4 new subscriptions at 75 cents each.

Langstroth on the Honey-Bee, revised by Dadant.—This classic has been entirely rewritten. Fully illustrated. No apiarian library is complete without this standard work by "The Father of American Bee-Culture." 520 pages, bound in cloth. Price alone, \$1.20. With a year's subscription, \$1.70. Given free for 4 new subscriptions at 75 cents each.

"The Honey-Money Stories."—A 64-page booklet containing many short, bright stories interspersed with facts and interesting items about honey. The manufactured comb-honey misrepresentation is contradicted in two items, each occupying a full page. Has 33 fine illustrations of apiaries or apiarian scenes. It also contains 3 bee-songs. This booklet should be placed in the hands of everybody not familiar with the food value of honey, for its main object is to interest people in honey as a daily table article. Price 25 cents. With a year's subscription, 90 cents. Given free for one new subscription at 75c.

Three copies for 50 cents; or the 3 with a year's subscription, \$1.00; or the 3 copies given free for 2 new subscriptions at 75 cents each.

Amerikanische Bienenzucht, by Hans Buschbauer, is a bee-keepers' handbook of 135 pages, which is just what our German friends will want. It is fully illustrated and neatly bound in cloth. Price alone, \$1.00. With a year's subscription, \$1.50. Given free for 3 new subscriptions at 75 cents each.

THE EMERSON BINDER

A stiff board outside like a book-cover with cloth back. Will hold easily 3 volumes (36 numbers) of the American Bee Journal. Makes reference easy, preserves copies from loss, dust and mutilation. Price postpaid, 75 cents. With a year's subscription, \$1.25. Given free for 3 new subscriptions at 75 cents each.

WOOD BINDER

Holds 3 volumes. Has wood back but no covers. Price, postpaid, 20 cents. With a year's subscription 80 cents. Given free for one new subscription at 75 cents.

BEE-HIVE CLOCK

A few of these handsome "bronze-metal" clocks left. Base 10 1/2 inches wide by 9 3/4 inches high. Design is a straw skep with clock face in middle. Keeps excellent time, durable and reliable. Weight, boxed, 4 pounds. You pay express charges. Price \$1.50. With a year's subscription, \$2.00. Given free for 6 new subscriptions at 75 cents each.

SEND ALL ORDERS TO THE AMERICAN BEE JOURNAL, 118 W. Jackson, Chicago, Ill.



(Entered as second-class matter July 30, 1907, at the Post-Office at Chicago, Ill., under Act of March 3, 1879.)

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GEORGE W. YORK, Editor

CHICAGO, ILL., OCTOBER, 1908

Vol. XLVIII—No. 10

Editorial Notes and Comments

National Convention at Detroit

It will be in session soon after most of the readers receive this copy of the American Bee Journal. At this writing (Sept. 22) it promises to be largely attended.

Don't forget that it meets in the Sun Palace of the Wayne Hotel, in Detroit, Mich., the opening session being Thursday evening, Oct. 13th. The convention then continues during the next two days. All being well, we expect to be present, and hope to meet and greet many old friends, and new ones as well.

Secretary Hutchinson has put forth unusual effort to have a good program, so it will not be his fault if it is not a successful meeting.

Let all go who possibly can do so, and help to make the Detroit convention of the National the greatest in every way of any bee-keepers' convention ever held on this continent.

The Honey Market Unusual

Movements in the honey market this year seem to be unusual and somewhat erratic. In the white clover belt, at least in many parts of it, an unusual crop has been harvested. In some other localities the crop is meager or a failure. Colorado will have little more than needed for its own consumption. Think of best comb honey standing firmly at 17 cents at San Francisco, while at least one Eastern market quotes 12½ cents!

Some dealers say that prices must come down to allow any movement of the crop, but the wise bee-keeper will not too readily fall into a panic and "give away" his honey. Prices of other articles in general are not so much lower than last year; indeed, some are higher. Yet one must take things as

one finds them, and in most places there probably must be a drop from last year's prices.

Langstroth Hive the Standard

The Kansas State Bee-Keepers' Association at its last session, held at Hutchinson, Kans., adopted the Langstroth hive as the standard hive for all beginners to start with in bee-keeping. We understand that this was not done with a view to discourage experimenting with other hives, but because of the Langstroth hive being more generally and more successfully used than any other. It certainly is a great mistake for a beginner to commence with a hive that is not approved by experienced bee-keepers. There have been so many so-called moth-proof hives invented and put on the market, and also other styles having so many contraptions, that it seems it might be wise for bee-keepers' associations to name one hive that they all know can be used successfully. Those who so desire can try the other kinds that are offered for sale.

It might not be a bad idea for the National Association to consider this matter at the Detroit meeting, and thus perhaps aid those who when starting in the bee-business desire to make no mistake in the hive they adopt.

Shipping Bees by Express

We have received the following in reference to shipping bees by express:

EDITOR AMERICAN BEE JOURNAL:—After vainly attempting to secure redress I think it proper to communicate to you the action of the U. S. Express Company regarding a shipment of a hive of bees delivered to that Company at Plainfield, N. J., for transmission to Rye, N. Y.

I personally packed the bees in what I understood to be the usual approved and safe

manner for transportation. The consignee being naturally unable to open the same immediately upon receipt, and the hive being without exterior damage, signed the usual formal receipt blank. Upon examination it proved that the hive had been so roughly handled that I was obliged to purchase a new queen, although the usual excess express rate was charged.

I made careful statement of all of the facts, asked the company to assure themselves that my standing was such as to show that I would not make an unfounded claim, and requested reimbursement either of the express charge, or of the cost of the new queen, as the Company might think just.

This action was taken by me practically at the request of one of the largest bee-supply and bee dealers in this country, who stated that the express companies' negligence in handling such shipments, although charging one and one-half or double rates, had become unbearable.

The Company refused to do anything in the premises, stating that the package had been delivered without showing injury, and receipted for, taking advantage, I suppose, of the knowledge that the loss was so small that it would not justify a suit.

I ask you to give this communication such prominence as you may think it deserves in view of its possible interest to the bee- fraternity.

Yours very truly,

HENRY CROFUT WHITE.

New York, N. Y., Sept. 14.

Mr. White's experience is not unlike that of others who ship bees by express. Of course, it is an outrage. But just what can be done to put a stop to such exasperating experiences, we do not know. Why not submit the matter to the National convention in Detroit next month? Perhaps something looking toward a possible solution can be found there.

On the Michigan Central to Detroit.

It has now been decided that those who will attend the Detroit convention from the Southwest, West, and Northwest, in going from Chicago to Detroit will use the Michigan Central Railroad. As the opening session convenes on Tuesday evening, October 13, it is expected that most of those leaving from Chicago will take the 10:30 a. m. train which arrives in Detroit at 5:55 p. m., or about 2 hours before the meeting begins. Arrangements have been made to attach a special car for the exclusive accommodation of the bee-keepers, provided there are enough to occupy it. No doubt most of those passing through Chicago will arrive here on Tuesday morning, so that the Michigan Central train leaving at 10:30 a. m. on Tuesday, Oct. 13, will be the one on which

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the largest number can go together.

The fare from Chicago to Detroit will be \$5.50, and the same returning. The Monday night train leaves Chicago at 10 o'clock, arriving at Detroit at 7:15 the next morning. If going on this train sleeping-car berth-rate is \$2.00. Those wishing such accommodations should communicate early with Mr. L. D. Heusner, General Western Passenger Agent of the Michigan Central Railroad Co., 236 Clark St., Chicago, Ill., being sure to state the number in the party so that he can make the necessary reservations.

Those who wish to go on other trains than those mentioned above can do so as per schedule shown in the Michigan Central advertisement on another page of this issue.

For the information of those coming from the East a condensed time table is also shown in the same advertisement via the New York Central Lines in connection with the Michigan Central.

Detroit is always an attractive city in which to hold a convention, and especially so at this season of the year. Those going from the West will have ample opportunity for side-trips by water routes as well as by rail, including Niagara Falls. Those coming from the East can make attractive side-trips to Western cities, including Chicago.

On page 263 of the September number it was stated that a ticket costing \$19.50 could be bought "reading Chicago to Niagara Falls; Gorge Route to Lewiston; Niagara Navigation Co.'s boat to Toronto, returning Canadian Pacific to Detroit, and Wabash direct; this ticket good for 30 days from date of sale." We have since learned that such tickets will *not be on sale after September 30*, so that it was a mistake to have announced it, for which notice the agent of the Wabash Railroad Company is responsible, he having supplied the information to us.

We now hope that all bee-keepers who can do so, will, in purchasing their transportation, see that it reads from Chicago over the Michigan Central, and, if possible, leave Chicago on the 10:30 a. m. train Tuesday, October 13. The Michigan Central is the well-known "Niagara Falls Route." It is splendid in equipment, and first-class in every way. We wish there might be a full carload to leave on the 10:30 a. m. Tuesday train referred to. If it should be so, the Detroit National convention would really begin in Chicago, and consist of a "continuous performance" for 8 or 10 hours before President Hilton calls the convention proper to order.

Floating Apiary on the Mississippi.

Floating apiaries on the river Nile in Egypt are things that have been read about for a long, long time, and some years ago quite a little was contained in the bee-papers about the floating apiary of C. O. Perrine on the Mississippi. It looks quite reasonable to believe that if one should have a lot of colonies afloat in some vessel, he might start near the mouth of the Mississippi with the opening of flowers, long before bees farther north could find anything to do, gradually moving northward with the advance of the season, thus extending

the season many weeks beyond what it would be in any one fixed locality.

It was never very clear that the Perrine venture was a great success beyond its value as an advertisement, but any one who desires to read a very full account of 5 or 6 pages from one who has had an extended experience with a floating apiary, in connection with a floating photographer's studio, will do well to get the September number of the Bee-Keepers' Review. In a very candid manner, D. Stad Menhall gives his experience, an experience that he seems to look upon with a degree of pleasure, for he says:

"We certainly enjoy this life, and have good health. There is no house rent to pay, with plenty of free wood and water, and our back yard is always clean."

He estimates an outlay of \$4,000 for outfit, and the same amount for yearly expense, but seems a little doubtful whether there is big money in the undertaking. At any rate he frankly says his boats are for sale.

He thinks an apiary following the bloom up the Mississippi river could be made a success *if* there were a strip of basswood or white clover 3 miles wide on each side of the river. He says further:

"It is true that the bloom does open gradually, going northward as the season advances, but it is just as true that there are not enough of nectar secreting plants to make a commercial success of a floating apiary. Excepting a few weeds, white clover is the only nectar-secreting plant that grows between New Orleans and St. Paul, and the acreage within reach of a floating apiary is not large enough to furnish a surplus for 300 colonies—only large enough for brood-rearing."

Feeding Bees for Winter

If bees do not gather enough stores for winter use, they must be fed. If fed late, the syrup must be thick, as the bees have not time to thicken it. Feeding early, using half sugar and half water, has been favored, as it allows time for the bees to make the desired chemical changes in the feed, but there seems some tendency toward later feeding nowadays, using half as much water as sugar.

Always there will be some beginner asking, "What shall I feed?" Nothing but the best granulated sugar. In the spring, after bees get to flying, you may feed about anything you can get the bees to take. But for winter stores it is dangerous to feed anything less than granulated sugar. Of course, that does not bar out good honey, but when a man asks, "What shall I feed?" it is safe to conclude he has no honey.

The wise bee-keeper has provided in advance a store of brood-combs solid with honey, to give to any needy colony, either for winter or in the spring.

Grading Colonies of Bees

About this time of year, perhaps a little earlier, comes one of the most interesting times to the wide-awake bee-keeper. The hurry of getting the crop out of the way is over, and he sits down leisurely to take stock of what each colony has done, comparing the yields of different colonies with each other and with the average. Not that he wants to gloat over his success in getting a good

crop; he is past that. He wants to know what each colony has done so that he may lay his plans for the next season.

Of course he has kept tally throughout the season, and knows just how much honey he has harvested from each colony in his possession. Then there are other things to be considered besides the amount of honey harvested by each colony, and taking all things into consideration he must decide which he counts his best colony to breed from in the coming year. Then the second best, the third best, and so on, regularly grading down. There is, of course, the possibility of winter loss, in case of which he will take the highest of those left for next year's breeding.

Of course this selection might be made next spring; but it can be done just as well now, and your true bee-keeper will hardly put off such an important and interesting item longer than he must.

Swarm Leaving Colony Queenless

There has been some question whether it ever happened that a swarm would issue with a virgin queen, leaving the colony hopelessly queenless. While it is probably not a common occurrence, it does sometimes happen, if there is no mistake in reports made by two correspondents in *Gleanings in Bee Culture*. Yet some of the cases reported look like desertion rather than regular swarming.

Fuller's Plan of Queen-Rearing

Mr. O. F. Fuller, a bee-keeper of 25 years' experience, has been experimenting in the matter of queen-rearing, and by certain modifications in frames and hives, which in good time he proposes to give free to the bee-keeping public, he succeeds in producing queens more easily than by any plan heretofore known. Doolittle cell-cups are used in the same story with a laying queen. Arthur C. Miller endorses the plan as an advance, as also does Prof. W. T. Brooks, of the Massachusetts College of Agriculture.

As giving some inkling of what he is doing, Mr. Fuller writes:

"August 10 I produced and had on exhibition 34 queen-cells of different ages, from 2 to 10 days old, all started in this same lower hive which contains 10 frames and also a laying queen—all in the same lower brood-chamber of a hive. I fully think that by another year I can produce anywhere from 15 to 20 or even 25 queens every 10 days, all started and hatched in the same brood-chamber that had a laying queen, and produce comb honey at the same time."

New Kink in Introducing Queens

Dr. Miller has been making a variation in introducing this year that he has named "the lazy plan." Instead of putting the caged queen between the combs or on top of the frames, he merely thrusts the cage into the entrance among the bees. This is an easy matter with his entrances 2 inches deep. The queen is left strictly imprisoned for 2 days. Then the bees are allowed to get at the candy, taking about 2 days to release the queen. That makes some 5 days from the time the queen is caged until she is free on the combs.

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and seems quite a safe plan, especially as there is probably some advantage in having the queen at the entrance rather than near the top of the frames.

It may be well, however, to caution beginners that the plan might not work so well when no honey is coming in and nights are cool. In a cool night the cluster of bees would be likely to shrink away from the queen, leaving her out in the cold. But under right conditions there is certainly an advantage in having the cage where it can readily be got at any time without the trouble of lifting off supers and opening the hive.

Take Sections Off Hives in Fall

The probability is that quite a number of beginners who read this page still have sections on the hive. So long as

bees are busy storing the right kind of honey, it is all right to leave them on, no matter how late in the season, but when storing has ceased sections should be taken off at once.

The beginner is likely to say to himself something like this: "I'm not entirely sure that the bees may not still have some use for sections, and at any rate it can do no harm to leave them on until time to pack bees for winter." That is a great mistake. At this time of the year, especially when no storing is going on, bees delight in spreading propolis indiscriminately, and the foundation in sections will be discolored thereby, in some cases to such an extent that the bees will utterly refuse to accept it the following year.

If you still have any sections on the hives, get them off at once.

Premiums Offered at the Detroit National

Through the generosity of the leading manufacturers and dealers the following liberal premiums are offered for the display of bees, honey and wax at the coming National Convention:

Best and largest display of single-comb nuclei of different varieties of bees, accompanied by queens, condition of bees, purity of race, and beauty of hives to be the competing points—1st premium, 2,000 No. 1 sections, by the G. B. Lewis Co., Watertown, Wis.; 2nd premium, \$3.00 Italian breeding queen from the Medina apiary of the A. I. Root Co.; 3rd premium, two years' subscription to the Canadian Bee Journal, by the Hurley Printing Co., of Brantford, Ont.

Best to section of comb honey, completeness of filling of section, evenness of surface of comb, completeness of capping, freedom from travel-stain, and general neatness and appearance to be the competing points—1st premium, 1,000 No. 1 sections from the G. B. Lewis Co.; 2nd premium, cloth-bound copy of the "A B C and X Y Z of Bee Culture," by the A. I. Root Co.; 3rd premium, one year's subscription to the Canadian Bee Journal, by the Hurley Printing Co., and one year's subscription to the American Bee Journal, by Geo. W. York & Co.

Best 10 pounds of liquid extracted honey, quality and manner of putting up for market to be considered—1st premium, 1,000 No. 1 sections by the G. B. Lewis Co.; 2nd premium, Jumbo, copper smoker, by the A. I. Root Co.; 3rd premium, Root Standard tin smoker, by W. D. Soper, of Jackson, Mich.; and one year's subscription to the American Bee Journal.

Best 10 pounds of granulated honey, quality, including fineness and smoothness of grain, and manner of putting up for market to be considered—1st premium, 1,000 No. 1 sections by the G. B. Lewis Co.; 2nd premium, Standard tin smoker by the A. I. Root Co.; 3rd premium, one year's subscription to the American Bee Journal.

Best 10 pounds of beeswax, color, texture, and beauty of the cake or cakes in regard to shape, to be considered—1st premium, one \$5.00 Italian breeding queen from the Medina apiary of the A. I. Root Co.; 2nd premium, one year's subscription to the American Bee Journal by Geo. W. York & Co.; 3rd premium, one Root Hive Tool by the A. I. Root Co.

The most important late apicultural invention that has not been awarded a premium—1st premium, \$5.00 worth of bee-supplies, "Root Quality," by M. H. Hunt & Son, of Lansing, Mich.; 2nd premium, one full leather-bound copy of the "A B C and X Y Z of Bee Culture," by the A. I. Root Co.; 3rd premium, one copy of "Advanced Bee Culture," by W. Z. Hutchinson, Flint, Mich.; and one year's subscription to the American Bee Journal, by Geo. W. York & Co.

For the best single section of comb honey, A. G. Woodman & Co. offer one Woodman Protection Hive; for the second best single section, they offer 1,000 No. 1 Lewis Sections; for the third best, one Advanced Bee-Veil.

For the best single section of honey stored in a Marshfield section-box, W. D. Soper offers 300 No. 1 Marshfield sections.

For the best 10 pounds of comb honey produced with Dittmer foundation, Mr. Soper offers 3 pounds of Dittmer's extra-thin foundation.

The judge to pass upon the above exhibits will be appointed by the President.

W. Z. HUTCHINSON, Sec.

California Apiaries of M. H. Mendleson

The photo used in the July American Bee Journal is from my home apiary at Piru. This apiary contains 500 colonies, and is run for comb and extracted honey. In the spring of each good year, I start with 200 to 300 colonies, and increase runs to 500 or 600 or more colonies. On the last of June of each year I move away about 150 to 250 or more colonies to the bean-fields for them to fill up in good shape for winter quarters. I used to get considerable surplus from the beans, but of late years



Program for Detroit National Convention

The National Bee-Keepers' Association will hold its annual convention, October 13, 14 and 15, in the Sun Palace of the Wayne Hotel, at the foot of Third St., Detroit, Mich. Headquarters will be at the Wayne Hotel, where the rates to bee-keepers are \$2.50 per day, when two persons occupy the same room. There are plenty of other hotels in the vicinity where the rates vary from \$1.25 to \$2.25 per day.

The Michigan State Bee-Keepers will hold a session at the same place on the afternoon of the 13th, beginning at 2:00 p. m. The first regular session of the National will be on the evening of the 13th.

OCTOBER 13—FIRST DAY—EVENING SESSION.

"Demonstration of Handling Live Bees in a Cage," by E. R. Root, of Medina, Ohio.
"Bee-Keeping of Hawaii," by Prof. E. F. Phillips, of the Apicultural Bureau of Washington, D. C. This lecture will be illustrated by stereopticon views secured by Prof. Phillips during his recent trip to Hawaii.

"Moving Picture Exhibition," by E. R. Root, of Medina, Ohio. (To run this film through the lantern requires about 10 minutes, and it gives a fair idea of some of the "stunts" they do in England when handling bees—some of them are decidedly mirth-provoking.)

OCTOBER 14—SECOND DAY—MORNING SESSION. 8 a. m.

"President's Address," by Geo. E. Hilton.
"The Bacteria of Bee-Diseases," by Dr. G. F. White, of the Apicultural Bureau at Washington, D. C.

"How to Detect and Know Bee-Diseases," by W. D. Wright, of Altamont, N. Y., one of the New York Inspectors of Apiaries.

RECESS OF 15 MINUTES.

"Getting rid of Foul Brood with the Least Financial Loss," by R. L. Taylor, of Lapeer, Mich., Inspector of Apiaries for Michigan.
General Discussion on Diseases of Bees.
Question-Box.

OCTOBER 14—SECOND DAY—AFTERNOON SESSION. 2 p. m.

Debate on the following: "Resolved that an Eight-frame Langstroth Hive is Preferable

to a Larger Hive in Extracted Honey Production;" affirmative taken by S. D. Chapman, of Manelona, Mich., and the negative by R. F. Holtermann, of Brantford, Ont.; each contestant allowed to speak twice, using not more than 15 minutes each time.

General Discussion on the subject.
Question-Box.

RECESS OF 15 MINUTES.

"Turning Winter Losses into Profit," by W. J. Manley, of Sandusky, Mich.

Question-Box.
Adjournment and Members Photographed in a Group.

OCTOBER 14—SECOND DAY—EVENING SESSION. 7 p. m.

This session is to be in a lighter vein—as the story is to be more solid reading. It is to be in imitation of the toasts that usually follow a banquet—that is, responses to sentiments. The speakers are to remain unknown until announced by the toastmaster, but the list of topics is as follows:

"Securing Legislation for Bee-Keepers."
"Rough Spots in the Pathway of an Inspector of Apiaries."
"Late Apicultural Inventions."
"The Possibilities of Future Bee-Keeping."
"The Cost of Honey-Production."
"Bee-Keepers as Temperance Reformers."
"The Friendship of our Fraternity."

OCTOBER 15—THIRD DAY—MORNING SESSION.

"Locating Apiaries," by E. D. Townsend, of Remus, Mich.

Discussion.
Question-Box.

RECESS OF 15 MINUTES.

Question-Box.

OCTOBER 15—THIRD DAY—AFTERNOON SESSION. 2 p. m.

"How to Secure Good Prices for Honey even in Years of Bountiful Yields," by O. L. Hershisser, of Kenmore, N. Y.

Discussion.

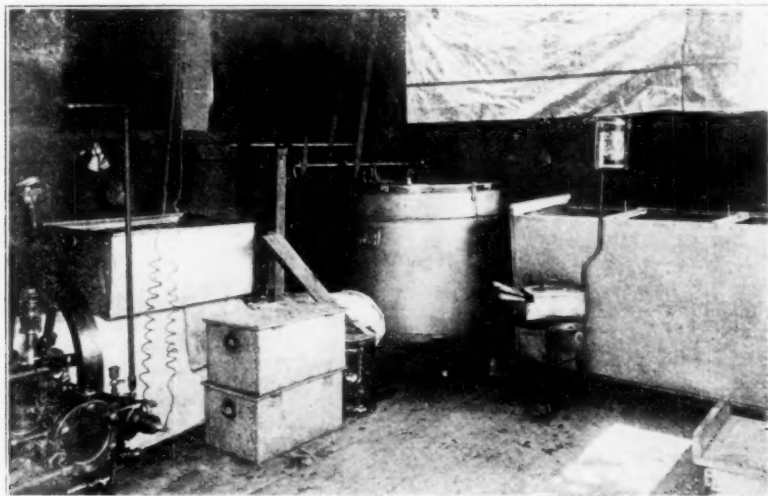
RECESS OF 15 MINUTES.

Question-Box.
Adjournment to see honey extracted with an 8-frame Automatic Extractor, with Gasoline Engine as Power.

The foregoing is simply an outline, a sort of skeleton which will be filled out with good things.

W. Z. HUTCHINSON, Sec.

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EXTRACTING ARRANGEMENTS OF M. H. MENDLESON, OF VENTURA, CAL.

it has been too cool and dry for good results for surplus there. One season I had 900 colonies in this apiary during the winter, and in the spring they were distributed to out-apiaries.

The end view (see first page) with buildings at the end, is from the same apiary, showing the warehouse and large shed to work under in the shade, and for storage purposes. You will notice 4 telephone wires at the house. They lead to out-apiaries, and 2 wires lead to the main line of the Home Telephone Company's lines. The extracting house is hidden by the trees.

The photo of extracting rig shown herewith is from the same apiary. In the near future I expect to have this extracting house larger, more convenient and up to date. That is, I have some inventions of my own to install to make it the most complete of any in Southern California. This is not meant for a boast, but from general observations here the rig will prove for itself.

The picture with extracting house in the center (see first page) is my Ramona Apiary. This is not completed. It also contains 500 colonies, mostly moved to the bean-fields this season to save them from starvation this bad year.

I have a power Root extractor to run by an electric motor to be put in this apiary, as the main line Power Company's lines run within a few hundred feet of the apiary, but they have not run out their sub-station lines as yet.

I have other nice apiaries, but I have no good pictures of them. I have located nearly all of my apiaries in the bottom of canyons, so the bees could reach their hives with the least labor possible when loaded with honey. They can soar *down* to their hives. Consequently results are better.

M. H. MENDLESON.

Piru, Calif., Aug. 18.

Honey Season in Colorado

A letter received September 21, from R. C. Aikin, of Loveland, Colo., has this to say about bee-keeping in Colorado this year:

"My honey crop—well, I have none—a total failure. I have been hit hard the last

few years. Denver and Northern Colorado have not enough honey this year for home demand."

It is very unfortunate for Colorado bee-keepers that the honey-crop is so short there this year. But what is one locality's loss may be another's gain, for the Eastern markets in some years have been pretty well loaded up with Colorado honey. Of course it is always very fine honey and generally in good demand. This year, however, it will not enter into competition.

By the way, Mr. Aikin is a candidate for governor of Colorado.

Starting New Bee-Papers

Editor Hutchinson has had experience. And from that experience he draws the following sane conclusion, in which we, after an experience of nearly 25 years, in publishing a bee-paper, most heartily concur:

"Many bee-journals have been born, breathed a few times, and died, during the last 25 years. If my memory serves me correctly, there were once 8 bee-journals being published at the same time in this country;

just at present there are only three; and I believe this is the smallest number there has been at one time in the last quarter of a century. Many of the journals that fell by the wayside did not deserve to live. They possessed little merit. Others were quite fair journals; but the cold, hard fact remains that the field for bee-journalism is limited.

"Notwithstanding this terrible object lesson—terrible to those who put in their big dollars and bright hopes—it is likely that others will follow in their footsteps. To make a success of starting a new bee-journal now would require barrels of money, unusual ability, and years of hard work, all of which turned into straight honey-production would bring ten times the profit. To the man about to embark in such an enterprise my advice is, 'Don't!'"

We suppose the foregoing was called out through the discontinuance of the late American Bee-Keeper, which of itself, could not possibly be a profitable venture at 50 cents a year.

Pleased with American Bee Journal.

In a letter from Mr. Edwin Bevins, of Leon, Iowa, dated September 21, he has these words of appreciation for this Journal:

I am pleased with the appearance of the American Bee Journal. I am also pleased with the prosperous and substantial look it is taking on. May you have, as you deserve, great success with it, and may its circulation meet and exceed that of its greatest rival.

EDWIN BEVINS.

Mr. Harry C. Mosher, of Dowagiac, Mich., writes thus kindly:

The Journal is very, very fine. Keep up the good work. "Dr. Miller's Question-Box" is alone worth the price of the magazine. I am renewing at the new price (75 cents) as the Journal is worth it.

HARRY C. MOSHER.

These are only samples of the cordial expressions we are receiving from some of those who know the real value of a bee-paper that is gotten up on the lines followed by the American Bee Journal. We appreciate such encouraging words.

Handling Bees at a Fair

Mr. Robert A. Holekamp, of St. Louis, Mo., made a display of honey at the St. Louis County Fair, and on three consecutive days exhibited bees in a cage. He was in the cage about 1½



E. E. KENNICOTT AND OTHER BRAVE BEE-HUNTERS.
(Glenview, Ill. This tree yielded over 4 gallons of clover honey.)

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hours each time, and "surprised the natives" by the way he handled the bees. He says "it is easy enough when you know how," which, of course, is quite right.

Mr. Holekamp is a thorough-going bee-keeper, and is also one of the directors of the National Bee-Keepers' Association.

He expects to attend the Detroit convention with Mrs. Holekamp.

Some National Convention Folks

The following persons have indicated that they expect to attend the coming National Convention at Detroit:

| | | |
|--|------------------------------|-------------------------------|
| Aspinwall, L. A. and wife. | Hutchinson, W. Z., and wife. | Pettit, S. T. |
| Abbott, E. T. | Hutchinson, Elmer and wife. | Phillips, E. F. |
| Ahlers, H. C. and wife. | Hilton, Geo. E. and wife. | Rice, M. M. and wife. |
| Barb, J. S. | Hoffman, Jacob and wife. | Root, A. I. |
| Provald, A. C. | Holtermann, R. F. | Root, E. R. |
| Carr, E. G. | Harmer, Walter. | Root, H. R. |
| Coveyou, Elias E. | Hunt, E. M. | Sims, Jno. S. |
| Cavanagh, F. B. and wife. | Hurley, Jas. J. | Smith, C. F. and wife. |
| Chrysler, W. A. | Hand, J. E. | Smith, F. H. and wife. |
| Chapman, S. D. | Hershiser, O. L. | Soper, W. D. |
| Cameron, R. | Huber, L. B. | Strittmatter, F. J. |
| Carter, Wm. | Lewis, J. L. and wife. | Tyrrell, E. B. |
| Cutting, H. D. | Muth, Fred W. and wife. | Taylor, R. L. and wife. |
| Dickenson, E. and wife. | McKnight, W. L. | Townsend, E. D. and wife. |
| Darby, M. E. | Miller, F. J. and wife. | Tyrol, John |
| France, N. E., wife, daughter and son. | McDonald, Fred B. and wife. | Thompson, Decker |
| Fowls, Chalon and wife. | Myers, Wm. | Werner, Louis |
| Forbes, W. E. | Myers, Thos. | Wilcox, Franklin |
| Furnass, W. C. | Manley, Wm. J. | White, W. G. |
| Frazier, W. S. | Manley, Herbert J. | Williamson, Geo. T. and wife. |
| Gute, Martin. | Mandeville, M. | Wood, A. D. D. |
| Holekamp, R. A., and wife. | Pressler, E. E. | Wright, W. D. |
| | | York, Geo. W. |

Let no one think that the foregoing are all the persons who will be present, as not one person in a dozen will take the trouble to write the Secretary and say that he is going; besides, many don't make up their minds to go until the very last moment. Notice the num-

ber of ladies that are to be present. There will be more ladies at this convention that have ever before graced a convention with their presence. Come, and bring your wife—if you have one.

W. Z. HUTCHINSON, Sec.,
Nat'l. Bee-Keepers' Association.



Conducted by EMMA M. WILSON, Marengo, Ill.

Uniting Colonies for Wintering.

DEAR MISS WILSON:—I had such good success last spring by following your advice in regard to swarming, that I again come to you for advice.

I had 5 fine swarms, 4 of which I treated according to directions on page 79, with complete success. The fifth colony had such crooked combs that I could not get a frame of brood out without tearing up the brood-nest, so I hived them in the ordinary way.

But this season has been a complete failure as regards honey-gathering. During white clover bloom it continued cold and rainy, and the bees barely made a living. We had a fine bloom of sumac, but it seemed to yield very little nectar. I do not expect any surplus and shall have to feed, but it is not the fault of the bees, for they are scurrying after every flower they can see. I do not think this can be a very good honey locality. When we had 3 or 4 colonies we could take about 80 pounds of surplus. Last year with 13 colonies we got a little over 300 pounds. I should like to double them up as advised by Dr. Miller and A. I. Root, page 1308 of *Gleanings*, making 6 or 7 colonies from the 13. If I place one hive above another with wire netting between for a few days till they acquire the same scent, then remove the netting, should I place an excluder between the hives to keep the queens apart, or remove one queen, or let them fight it out themselves? In the pile of hives you sometimes have, you allow but one queen, and I should think that would be the case in uniting 2 or more colonies. Would the united colonies require as much feed for wintering as if each were on separate stands?

(Mrs.) FRANCES THOMPSON.

Manes, Mo., Sept. 4.

If you have any choice of queens you can remove the inferior one; if not, it will be all right to let them fight it out. But unless the colony in the upper story is very weak, you must give them some chance for flight while above the wire-cloth. You can do this by pushing the cover back, leaving just room for the bees to get out.

Decidedly the united colony will not require as much feed as the two separate, and be safe to winter, too.

She Got It Kerwhack.

A dear old lady from Saranac,
Said as she stroked a bee's back,
"You dear little thing,
I am sure you won't sting."
Just then she got it kerwhack!

—OTTO.

"Among the Saccharine Hives."

A much-esteemed sister has sent a newspaper clipping, "The honey-flow: Among the Saccharine Hives in July." It was published in the *Manchester Guardian*, and the *Boston Transcript* thought well enough of the article to copy it. Too bad that its length prevents its presentation in full in this department; but a few random excerpts

are given, partly to show how poetic one may be on the subject of bees, and partly to show how one may draw upon one's imagination for part of one's facts:

"It is a wonderful sight, this honey-flow—one long crowded hour of glorious life. The bees no longer come out as single spies or in random clusters, but in whole battalions. By noon, when the neighborhood of the hives is filled with a delicious pungent odor of honey, they pour out of the entrance in a black, murmuring stream, leaving just a neat, narrow way for those returning laden from the fields.

"All day long there is a joyous hum which rises and falls with the sun. In the early morning it is fresh and faint, being scarcely audible. But as the day advances it flutters up from octave to octave, rising at times to a pitch of ecstasy. Then as the afternoon wanes there is a crescendo, followed by a lull, which sinks at evening into a low monotone of droning content.

"The baby bees, just out of their cells, are also pressed into the service. They must make their maiden trip in search of honey, for no one can be spared.

"For the bee-keeper this is a glad but anxious time. All his sections are ready and scented with mint and lavender to lure the bees up into them."

Arabella Love Amos.

Mrs. Arabella Love Amos was the oldest of five children born during the 60's, of Scottish parentage, to John and Barbara Love, in Wisconsin. Mr. Love had travelled widely in oriental countries and spent much of his time lecturing on two continents. Mrs. Love died when Mrs. Amos was about 9 years of age, and Mr. Love returned to Scotland, where the children were educated. Upon the death of Mr. Love, some ten years later, Mrs. Amos, being the oldest of the family, thought it best to return to this country, where she migrated to Custer Co., Neb., and took land and proceeded to establish a home for the rest of the family. The next few years were spent largely in teaching school, for which she was particularly fitted, and at which she was very successful. In 1891 she was married to Mr. Z. D. Amos, an exemplary young man of more than ordinary financial ability, and together they acquired several hundred acres of land.

Mr. and Mrs. Amos, besides having 3 daughters of their own, have made, at different times, a home for several



MRS. A. L. AMOS.

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motherless children, one of whom was adopted in earliest infancy, and who will sadly miss her best friend.

Of late years Mrs. Amos had given much attention to the subject of apiculture, to the many perplexing problems of which she brought a mind of more than ordinary perceptions. Both as a writer and lecturer on bee-topics she had made a more than State-wide reputation.

She died July 26, 1908, at her home in Custer Co., Neb., from a complication of diseases, and was followed to her last resting place by the largest concourse of people ever seen on a like occasion in that vicinity.

Spacing Brood-Frames—Running for Extracted Honey—Equalizing Brood.

DEAR MISS WILSON:—How far should brood-frames be spaced from center to center? Those I am now using are closed-end, $1\frac{1}{2}$ inches wide. I am going to change to another frame, and one manufacturer sends a sample that is about one millimeter less than $1\frac{3}{4}$ inches wide. I am going to run for extracted honey, and use the same size frame in both super and brood-chamber.

Is it advisable to transfer brood from one colony to another to equalize them? If so, in what stage should the brood be?

If in running for extracted a super becomes full of sealed comb, you are not ready to extract, and don't wish to put on another super, what would you do with the combs? This year I stored some in weaker colonies, and instead of taking care of it, they used it for rearing brood.

This is my second year with bees and I don't want to make a mistake in starting again.

The information coming from Marengo, I consider none better, and I thank you and Dr. Miller for a great deal found in the journals the 2 years I have read them, and shall appreciate your and his say on above questions as a personal favor.

Hollis, N. C., Aug. 25.

The spacing of frames generally used is $1\frac{3}{8}$ inches, from center to center, although some prefer $1\frac{1}{2}$ inches.

A great deal of good, and a great deal of harm, may be done by giving brood to equalize colonies. Undoubtedly it is a good thing if care is taken to give no more brood than the bees can care for. The riper the brood the easier it will be for the bees to care for, and the sooner they will build up. Much harm would come from giving brood that would not be covered, only to be chilled. It would also be harmful to weaken too much the colony from which you draw. Better never leave it less than 4 frames of brood.

You stored your full combs of honey over weaker colonies, and you say "instead of taking care of it, they used it rearing brood." You seem to think this a mistake. Not a bit of it. They needed it or they would not have used it, and you could not have used that honey in any better way. It is a big mistake to stint your colonies as to stores. If, however, for any reason you don't want that honey used for rearing brood, you can take out as many frames as you wish, and store in the house, keeping on the lookout that worms do not trouble them. But there is no place so good to keep honey as in the care of the bees; and if you do not wish to give another whole super you can store in an upper super a single comb, or as many combs as you wish, replacing them with empty ones in the lower super.

Thank you for your kind words and good wishes. Please let us hear from you again.

An "Amateur" Sister's Report.

Seven colonies, spring count, 2 colonies absconded (the villains!), 1474 pounds of honey—both comb and extracted. How is that for an amateur? (Mrs.) J. J. GLESSNER.
Littleton, N. H.

An average of 210 pounds per colony! That's enough to make even a veteran green with envy.

Father Vs. Bees.

You talk about the sprinting match
Across the dark blue seas;
But you ought to see my father sprint
When mother hives the bees! —OHIO.

A Human Hive Lifter for the Sisters.

The picture shown herewith was sent by Mr. J. L. Anderson, with the inscription:

"The 'Old Reliable' hive-lifter; self-adjusting, easily controlled, such as every lady bee-keeper should have. (See American Bee Journal, pp. 11 and 73.)"



A SISTER'S HUMAN HIVE-LIFTER—"ANDERSON PATENT."

There is certainly recommendation in that short description.

"Self-adjusting;" no need to waste time making changes to adapt it to a dovetailed hive, a Heddon, or a Jumbo.

"Easily controlled;" well—that is, generally speaking. It has the advantage that it is adapted to other uses than lifting hives—lifting carpets, for instance. This kind of hive-lifter comes high, but the best is often the cheapest. It is however, very durable; the one in the picture has been in use many years and is almost as good as new. Any one desiring to secure this particular machine, can open negotiations with the lawful owner, Mrs. Anderson.

[We are surprised that Miss Wilson failed to give directions for securing one of these perambulating hive-lifters, seeing the particular one shown in the illustration is not on the market. No doubt there are others "on the market" that are "just as good," and would give equal satisfaction, although "the lawful owner" of the Anderson style might not

think so, as she could speak of many years' experience with hers. However, it may be Mrs. A. could give more successful directions for securing a hive lifter of her kind than could Miss W.—Editor.]

Moth-Worms—Cross Bees.

I noticed one colony of my bees that were in an old box-hive were not storing any surplus. It was a last year's swarm, and in June I put on a surplus super and noticed a good show of brood and honey. I investigated—that is, pried off the super and found that the wax-worms were at work. I took out a half-bushel of comb and web, and left the rest. The next day robbing commenced and by night they had little honey left in the brood-frames. I thought to transfer them, but it grew late and I could not smoke them out into the new hive. The next morning I was called away from home, returning about one o'clock. As I got out of the buggy the air was full of bees, and I looked in the hive and they were gone, and no wonder. No honey, no brood but hundreds of big, fat wax-worms, which I find the chicks relish very much.

I melted up what comb was fit, and got about a pound of wax. It is likely that if I had been looking my bees over I would have discovered the wax-worms some weeks ago, but I do not like the box-hive and do not interfere with the bees unless necessary. I should have transferred this colony to a new

hive, but as I am only an amateur, I put it off until too late.

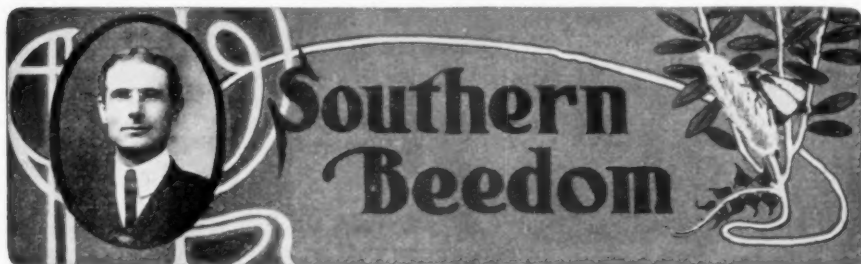
My best producing colony of bees this year were very ugly, bunting their heads against the screen doors of the house, trying to get at me many days after I robbed them of their honey. I would much rather have ugly bees and full supers, than empty supers and tame bees. —OHIO.

You appear to think that bees ought to be in movable-frame hives, and in that you are right. But to have transferred would not have saved the bees from wax-worms after they had proceeded so far. Almost certainly the colony was queenless and the bees old at the time of the windup, and if you had transferred them you would not have had anything of value.

The moral is to have movable-frame hives, and queen-right colonies, for a strong colony with a good queen will keep the moth at bay. Even a weak colony is pretty safe against worms, if the bees are Italians.

I am not fond of cross bees; but I quite agree with you in preferring those that fill their supers, even if their temper are not the best.

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Conducted by LOUIS H. SCHOLL, New Braunfels, Tex.

Those Congratulations—"Queenlessness."

Many thanks for the kind congratulations, Miss Wilson, (page 266); but it seems to me you left out the "other fellow." Indeed, the stunt would have been "pretty good—for a man." However, it should have been, "for a man and a woman," for what Mrs. Scholl did was good—for a woman. And she'll receive her share of the congratulations for it even if others fail to do so.

But all joking aside, there are times when some of the accomplished tasks are pretty good—for a woman. What would we do without the woman, especially in the rush of the busy season? Then it is that the "queen" of the household counts, and it is this reason that makes many of us more successful. Somebody will laugh at me, just because I love the fairer sex of mankind. Among them a lot of bachelors, perhaps, and since I've had a little experience with such, a bachelor's home always seems to me like a queenless hive of bees. No, I am not off the subject of bee-keeping. It may help somebody more than we think.

Faults of Bee-Papers, Large Honey Crops, Etc.

Now since we have but 3 bee-papers published in the United States, let us keep them up to their present high standard of excellence. I, for one, am proud of our bee-literature. If you have not noticed the wonderful improvements in our bee-papers, just compare one of today's with one of 25 years ago.

But one of the faults I have to find with the present bee-papers is that they take up too much space in telling how to do things on too large a scale, such as visiting out-yards in automobiles; how to run 1,000 colonies of bees with but two or three visits a year; how to ship a carload of section honey without the loss of a single section, etc. But, then, I like them all, anyway.

STRONG COLONIES AND "WORMS."

I have thought for many years that the so-called "moth-worms" did little or no harm to a strong colony of bees, but I have recently had cause to change my mind. I found a strong colony of mostly black bees in a large hollow elm tree, that had their combs almost riddled with these worms, and I have reasons to believe they would have destroyed the colony notwithstanding they were very well supplied with honey, and apparently had a good queen.

THAT 40,000-POUND CROP.

The report of Mr. Louis Scholl's 40,-

000-pound crop of honey makes some of us feel as if we were doing rather a "pin-hook" business at bee-keeping. But perhaps if some of us had as many colonies of bees as Mr. Scholl, we would not fall so far behind him, after all.

DIFFICULTY OF INTRODUCING AFTER FLOW.

It is a fact that queens are much harder to introduce in late fall after breeding begins to slack up than in the height of the breeding season. Just why this should be so I am unable to tell. Perhaps they feel their season's work is about at an end, and that their time will be short, anyway, and that they can live the rest of their days without a mother.

BEES RETURN FROM SWARM WITH OLD QUEEN.

C. W. Dayton, of California, called attention some time since to the fact that when bees swarmed with an old, failing queen, the swarms were usually small, and, if large, most of the bees would return to the mother-hive, either before or after being hived. This fact I thought was so generally known among practical bee-keepers that I had never seen fit to call attention to it. Yes, sir, I have witnessed this fact many times. I had a case of that kind the present year. A large swarm issued at noon. I caged the queen and put her with the clustering bees, and came in to dinner. On my return I found at least half the bees had returned to the old hive. This, as stated, I had seen many times before, but never with a vigorous, young laying queen.

APIARIST MUST SUPERSEDE THE QUEENS.

Will bees always supersede a queen when she begins failing from old age? I have heard this answered "yes," many times, but from long and practical experience in watching this, my answer is "no." I think nearly, or quite, one-third of the bees hold on to their old queens until they are worthless so far as surplus honey is concerned. I had 2 old queens left in one of my out-yards last spring after I got through requeening, that showed signs of failing. So I decided to leave them to see what the result would be. Now for the result: Those bees have those old queens yet, and not a pound of surplus honey from either colony, while those I requeened have stored 100 pounds and upwards, to the colony. Can you blame me for not leaving the superseding of my queens to the care of the bees?

Rescue, Tex. L. B. SMITH.

Tut, tut, Mr. Smith, just what I like about the bee-papers you are fussing about. It is just these things that have helped me to do things. Automobiles

are going to be too slow soon—air-ships will enable us to go straight across.

Is it not true that black bees are more susceptible to "worms," and that we should Italianize? This accounts for the "worms" in that elm-tree colony.

With the aid of the bee-papers, we expect to do still greater things in the future—just you watch!

Bee-Keepers' Exhibit at Fairs.

Several years ago I had a large crop of honey, and all the merchants being stocked up, I was unable to sell it. So I arranged an attractive exhibit in a show window on a prominent street in my town. First, I had an observatory hive and placed some of our best looking bees on fat combs of honey, sealed white, to attract the people; and it did. Then we had large, white clear-glass bottles in which to exhibit our honey, both comb and extracted; and beeswax moulded in cakes, with honey in 1½ and 3 pound jars, all beautifully arranged, and stating the prices of the honey. It was only a few days before my entire crop was disposed of, and a permanent sale established. I occupied the most popular show window in this town.

If I had a large apiary like some bee-keepers, and produced large crops of honey as some do, I would be like the monkey-man, the balloon, and the taffy-candy men, and would follow up all the fairs and exhibit and sell all my honey. Take some nice observatory hives full of bees, and large flint-glass jars, like those in my exhibit, and have printed cards giving your address. You will be surprised at the results you will get out of this method; and, best of all, it is a great educator for the people. Be with your exhibit, if possible, and politely answer all questions, and lecture to the people on bee-culture. If practical, manipulate your bees before the public. Also exhibit your beeswax.

Waco, Tex. C. S. PHILLIPS.

The Louis H. Scholl apiaries have been doing their part in this line of work, and are again this year "doing the fairs" with an exhibit of not only bees, honey, and beeswax, but some of the things made out of honey and wax. Fruits preserved in honey and over a dozen kinds of cakes, etc., are among them. Honey leaflets and cards are used in connection. It is fun to do such missionary work.

"TO dare is often the impulse of selfish ambition or hair-brained valor: to forbear is at times the proof of real greatness."

Washington Irving.



A Visit to Luther Burbank

Honey-Bees and the Red Clover.

SANTA BARBARA, Calif., Sept. 19, 1908.

For a number of years bee-keepers have tried to produce a race of bees which could secure the honey of the red clover at all times when this plant is in bloom, but thus far success is only partial. When we think that we have secured Italian bees which proved good red-clover workers, a season comes when none of them are any better able than the common black bee to harvest anything from the long corolla of this plant.

Does this mean that we will never succeed in producing long-tongued bees? No; but we are too sanguine. We expect to secure in half a dozen generations an improvement that will very probably follow years and years of constant selection.

There is another way to reach the goal of honey-production from red clover. It is the securing of a plant which will have shorter corolla than the ordinary red clover, while yet retaining all the other characteristics of this plant—its red blossom, its heavy stem, and powerful strength—qualities that are missing in both the white and the alsike clovers. Allow me to digress a moment in order to tell you how I came to discuss this subject with one of the best authorities in the world on plant domestication and variation.

I am just now, in company with my wife, taking a protracted vacation as you have noticed by the heading of this letter, dated from Santa Barbara. Our children are all grown and able to look after our interests so we decided to make a long trip to the Pacific Coast. We left home on August 1, going north by way of Winnipeg, and westward on the Canadian Pacific through the Rockies and the Selkirks, and in the past two months we have not seen a bee-paper, either American or European, and have almost forgotten that there are bee-keepers in the land, although every now and then the little honey-bee, quietly working on the flowers, reminds us of the home and our long life pursuit.

While in the neighborhood of San Francisco, we had the pleasure of a visit to the famous Luther Burbank, the "Wizard of the West." It happened in this wise:

My wife belongs to a floral society in our town, and she had often read of Burbank's wonderful achievements. She desired to see him, but we felt that it was out of the question to call on him unless we could be sure of a welcome. I took the liberty to write him a letter,

and received a very cordial reply in a very short time, inviting us to call on him at the time of our passage, and stating that he was once a bee-keeper himself, in New England, some 38 years ago.

Well, to make a long story short, we called at Santa Rosa, his home, were very nicely received by Mr. Burbank himself, and were shown by him through his experimental grounds. It would be out of place to recite here all that we saw, for this is a bee-paper and not a horticultural publication. But I can not refrain from saying that Burbank's greatest hobby is the cactus. We saw giant thornless cacti, loaded with pears of large size, and also absolutely thornless. Mr. Burbank, to show how absolutely smooth his plants were, would rub the leaves against his face. Pointing to his home, a very fine mansion, he said, "That house was built out of the proceeds of the sale of 5 leaves of the Giant Thornless Cactus, sold by me to the Australian Government for \$1,000 each."

Among other wonders, such as the thornless blackberry, the corn without ears, grown with the intention of supplying a giant fodder and hay plant, we saw a patch of sweet clover upon which Mr. Burbank is experimenting in view of eliminating the bitter flavor of the plant, which is said to be the cause of the dislike of cattle for this forage in many sections of the country. Mr. Burbank expects to succeed, in the course of time, in eliminating this bitter taste, and making the sweet clover a first-class forage plant.

Well, we had a little talk with him about the honey-bee, and I incidentally mentioned the efforts made to produce a long-tongued bee, and enquired as to the possibility of obtaining a red clover with short corolla. Of course, this is exactly in the line of Mr. Burbank's work, and he at once described the proper steps to take to secure this improvement, which he said would probably take years of patient work with unending perseverance. But as this work may be carried on by many agricultural workers at the same time, there is no reason why success would not be finally achieved.

Here is a synopsis of his suggestion: The best method to ascertain the existence of short-corolla clover, is to take notice of it at a time when the bees work upon it. We all know that there are seasons, usually during the second crop, when the corolla is shorter, and the bees sip nectar from it. Closely watch the bees and mark and select the heads upon which the bees are positively seen, not merely to alight, but actually to sip nectar. Such heads as are most

successfully worked upon by the bees should be secured for seed. Season after season, this selected clover should be watched during bloom. Whenever blossoms are found upon which bees succeed in harvesting nectar during the first bloom, the problem will be practically solved, and all that will be necessary then will be to continue the selection from year to year until a clover is produced that is readily visited by bees. Not only will this give a great addition to the honey-yield, but it will also secure a seed-yielding crop during the first season as well as during the second crop, for it is a well-acknowledged fact that the first crop of red clover yields no seed because there are no insects that can work upon it and fertilize it.

I am just now reaching the honey-producing section of California, and although we promised ourselves to make our vacation entirely devoid of business cares, yet it is possible that I may meet enough bee-subjects before I return home to give something more on these questions to our friends of the American Bee Journal.

C. P. DABANT.

Honey as an Anti-Dyspeptic Agent

BY MRS. F. P. WHITE.

For more than a year I had dinned into my unbelieving ears this sentence: "Use honey instead of sugar and you will not have sour stomach." Not because I believed my friend's prescription would help me, but merely to please her. I tried it for two weeks. I did not like it at first, but after a few days became rather fond of it and since it relieved me of many ills to which my too abundant flesh had been heir, I would have eaten it had I really disliked it. For two years I had seldom eaten a meal without suffering from indigestion and its attending evils. I could use as much honey for sweetening as I cared to with impunity. The flatulence, eructation and distension entirely disappeared and my old friend took full advantage of the situation by her frequent "I told you so."

I am a trained nurse, and in October, 1906, received into my home a man seventy-nine years of age, and, according to medical opinion, not likely to get much older. He was a paralytic, and was carried up stairs by four men. He ate heartily, and with no exercise, indigestion followed as night into the day. I tried giving him two meals instead of three for one day. I emphasize one, for at 11 p. m. of that day I arose and prepared his belated supper lest he disturb the neighbors. I next reduced the meals in quantity, and his lamentations were not to be endured. He ate sugar in and on everything possible, so I began substituting honey, and found that it worked like a charm. Wishing to be sure, I returned to the sugar, then back to the honey four times in two week periods until I am convinced past all doubting that for him and me honey is a ministering angel.

My patient is an old friend of Mr. N. E. France, who visits him often:

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when I made known to him my wonderful discovery he smiled and said: "That discovery was old when Confucius was a boy." Mr. Brown is still living, and very comfortable, although two years have passed, and I attribute his fine condition partly to the use of honey.—National Bee-Keepers' Association.

A Little Talk on Bee-Hives

BY REV. C. T. OHLINGER.

On the photographs I submit with this article a good variety of hives can be seen. There is the regulation dove-tailed hive in front of the honey-house, single-walled with 8 Hoffman frames. This I call my experiment station.

On another view an old-fashioned Langstroth-Simplicity with the inevitable portico is conspicuous. The large white hives with inscriptions for distinguishing marks are chaff-hives holding 10 Hoffman frames. This style is "our own make." There being no patent on them as yet, any one is free to duplicate them. The body rests on an inclined bottom, and the cover is deep enough to take in 3 supers.

Now look at the view where you see the covers trying to fall off. Don't think for a minute that a cyclone had passed over the bee-yard. Atmospheric conditions were very agreeable in this neighborhood. No, the trouble came from putting standard supers on odd-sized hives. Tar-paper and feed-sacks and oil-cloth had to be used to keep out the rain and the robber-bees. Of course, one's esthetic sense is shocked when looking at such a variegated arrangement. But what of it? Let me whisper into your ear that I took twice as many sections from some of those antediluvian makeshifts as from the elegant chaff-hives. One colony has not swarmed in 3 years, doing good work every season. Why should I condemn them when I get what I want from them?

I am not opposed to new ideas. Now would it matter if I were? But while I am not against innovations that go to make bee-keeping more enjoyable and easier, I never go into hysterics over them. I have read about the many so-called short-cuts, about the great speed

with which some of the professionals go through their hives; about the lightning rapidity with which they can put a cover from one hive to another; about the great number of colonies they can feed in a minute; about the marvelous celerity exhibited when pursuing the art of scraping sections; about the mystifying legerdemain when clipping queens—that I felt as if some one stood in the bee-yard with a stop-watch in hand, calling, "Ready—Go!"

According to American doctrine time is money. Good thing; many of our bee-keepers have a vast supply of this species. We are fast making a god of speed in all our sports, professions, and—bee-keeping. As it is, when some of the fast-timers reach the goal they have only breath enough in their lungs to give one cheer, and then drop.

The long "hives" on one of the views are made to take in 6 regulation hive-bodies of 10-frame size. These can be removed and shifted about whenever necessary. There is ample room for packing around the colonies, and they exceed anything I have tried in wintering.

Besides these regular hive-bodies which I call the "visible," I experimented with the so-called "divisible." As yet I have not found enough advantage in them to adopt them generally. Now, I believe every well-regulated apiary ought to have at least one or two "invisible" brood-chambers, commonly called box-hives. I keep a few of them just for the fun of it. It is marvelous what the bees can do when left to their own devices. They beat some of those over-manipulated hives all to pieces. The bee-keeper is all in the dark as to what is going on in the brood-nest; well, so are the bees, and that is the way they like it best. I don't think they want the search-light of inspection turned upon them every 2 or 3 days. This smacks a little of heresy. However, I am talking only about my bees, and not about my neighbors.

The difference between an old, weather-beaten chaff-hive of 20 summers, and a brand new factory hive, was demonstrated to me during swarming time. In order to be up-to-date I keep a few clipped queens, of course. One day one of them swarmed. Everything went off

according to the regular program. The queen was found and caged, the old hive was removed, and set on another stand, a new hive was put in its place, the queen-cage placed on the alighting-board close up to the entrance, the swarm very promptly returned, and went into—the next hive that resembled the old one, and my poor queen was deserted. The few bees that came over to see her seemed to act as a committee that was sent to coax the old mother over to the colony in the next hive.

A visitor to my apiary asked me whether that curious-looking bee-hive in yonder corner was perhaps the celebrated "dual-queen system" hive. I frankly admitted that it was not. It was the proverbial nail-keg that I kept for curiosity's sake. Of course, I enlarged upon the subject of dual queens. It ran thus:

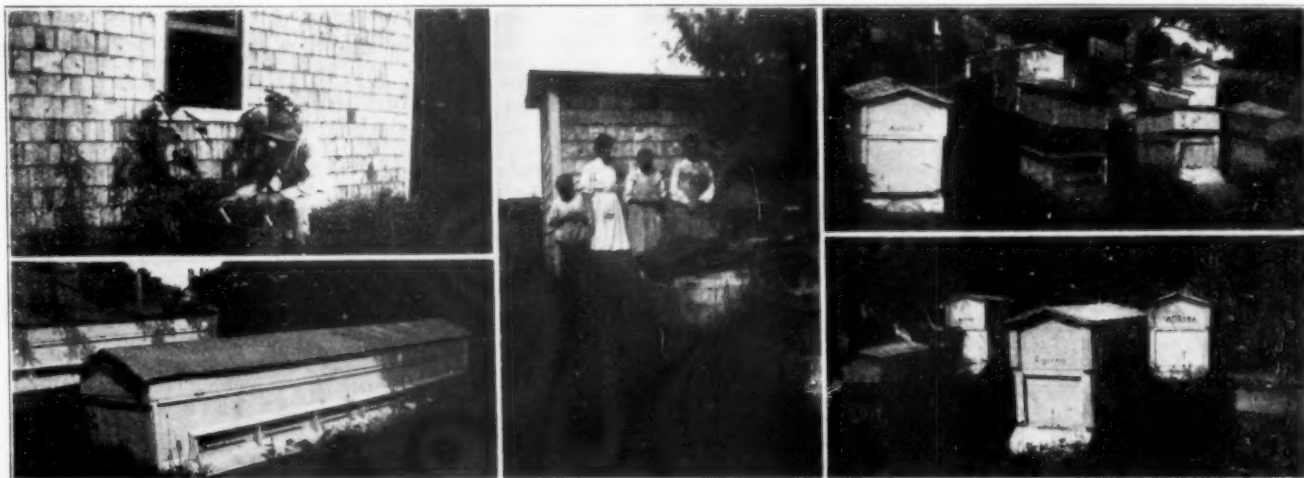
Take a colony of bees. Find and cage the queen. Drive as many bees as possible into a box. Remove it and screen it off on the bottom and on the top. Starve the bees half to death, then feed them until they nearly burst. Shake the box until all the bees are in a state of delirium tremens. Bring them back to their hive, run in the old queen on top and the new one below. Everything being in a state of revolution in the hive the bees disregard all established customs, don't care whether they have one queen or a hundred. After a while, however, the bees will return to their old ways, and everything is run on the single-queen plan as though nothing had happened. The real *modus procedendi* may be different, but this is the way I understand it.

Angelica, N. Y.

How to Keep Empty Combs

BY LEO E. GATELEY.

No matter whether his operations be extensive, or if only a small number of colonies are being handled, every bee-keeper will occasionally have a number of empty combs on hand which can not be put into use at the time being. Such combs are valuable, and should never be permitted to become destroyed, as they are sure to be needed in the near future, if not before the season is ended.



A FEW VIEWS OF "BELLEVUE APIARY" OF REV. C. T. OHLINGER.

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While it does not pay to use defective combs, neither is it profitable to keep the bees continually at it building new ones, or drawing out comb foundation, which virtually amounts to the same thing. The profits of bee-keeping are not so large that one can neglect these small items and make a financial success of the business. Though not of tremendous importance, in order to put the business upon a paying basis, the bee-keeper can not ignore these small details.

The extracted-honey producer is not the only one to whom empty combs are of value. There is no yard run for extracted honey where idle combs are better cared for than in our comb honey apiary. If they are to be had, a full set is given in place of foundation when hiving swarms. They are, also, superior to foundation in transferring. As long as a comb is straight and even, and comparatively free from drone-cells, it is kept in use for years, and is preferable to that newly constructed.

Probably the greatest difficulty of all in keeping empty combs will be met in the shape of the ordinary wax-moth, especially if there are a few scattered cells containing pollen. Moths are a constant menace to idle combs during the warm months, and should they make their appearance, there is but one thing to be done and that is to fumigate. Bisulphide of carbon will be found preferable to cyanide of potassium, sulphur, or any other of the various things recommended for this purpose. We use it quite often, not only for combs and honey, but for the pea and corn weevil, etc. When only a few combs are to be treated they may be placed in a tight barrel, filling it nearly full if necessary. On top of the combs set a saucer, or some open vessel, into which a small bottle of the liquid is poured and an old piece of blanket or carpet thrown over all. Of course, where a quantity of combs are to be fumigated, the barrel would be too slow, and a tight bin or room that will accommodate all, should be used. As some smell of the stuff may cling to the combs for a few days, it is probably best not to use them immediately after the treatment.

So long as no moths appear, the proper place for idle combs is a lot of empty hive-bodies piled across each other in some light, dry spot. If you would have them become moth-eaten, put them in a close, dark box, and by no possibility could they be more ably arranged to that end. After fumigating, it may be well to put them at once into a tight box, but should a crack be left sufficiently large for a moth to enter, we will have hit our finger, instead of the nail, for a dark, quiet place is the favorite rendezvous of this pest.

An excellent place for empty combs is in the care of the bees. Any strong colony can care for quite a number more of combs than is in actual use, and a section of such a hive as we use, filled with empty comb and placed below them, is not going to interfere with their work in the least.

On several occasions, we had combs badly eaten by mice; but this was purely the result of carelessness. As mice do not become troublesome until winter, when there is little danger from moths,

one has only to pile the combs up in tight hive-bodies, with a close-fitting cover put at the top to make the whole mouse-proof. Combs may be completely riddled by mice if they are not kept from them; especially if they should contain some honey.

Mold is another thing to be avoided in keeping empty combs. If placed in a damp place or under a leak in the roof, they may become wet and mold. A sure preventive for this is to keep them at all times in a dry place.

The number of good combs I see strewn about the apiaries at neighboring farms to rot and become moth-nurseries, is little less than outrageous. I venture to assert that the value of such combs thrown away as useless, would in this State during the course of a year set some poor bee-keeper upon his feet.

Ft. Smith, Ark.

Preparing Bees for Winter

BY G. M. DOOLITTLE.

Along the middle of last February, I was accosted by a bee-keeper living 6 or 7 miles from me, who wished to know how the bees were wintering. I told him that they were doing as well as usual, and asked how his were wintering. He said he guessed all right, that he had not looked at them since the December before when he "hefted" the hives, and from the "way they hung to the ground," he considered them all right. To the practical bee-keeper such ideas seem quite strange, yet I find that more than half the people who have bees about here, and especially those who have gone into bee-keeping during the past few years, know just about as much about their bees being in good condition for the winter during the fall months as did this man.

I have been told hundreds of times during the past 40 years, and by some who thought themselves quite high up in the bee-keeping world, that according to the "heft" of the hives the bees should winter well, this hefting being done, as a rule, the last of November or first of December. I find that very many seem to think that bees need little or no attention during the months of September and October, believing that the month of November is early enough to prepare bees for winter; and quite a few seem to believe that all the preparation that is needed then is to "heft" the hives. Perhaps I should not be too severe on such, for I used to think that way, too; but after losing heavily several times when preparation was thus delayed, or a guess was made in the matter by simply lifting the hives, I made up my mind that something was wrong, and took the advice of an old bee-keeper, who told me that the month of September was the proper time to fix the bees for winter. After working on his plan for a number of years, I found that he was quite right about the matter, and as I am now fixing my bees for the coming winter, I thought it might not be uninteresting to the readers of the American Bee Journal to know how I do.

There is one part of this wintering matter that should not be put off even

as late as September, and that is the *knowing* that each colony has a good queen. This part is generally looked after during the latter part of July and the first half of August. All colonies which are found to have queens which are not up to the very best, during the forepart of the season, are marked, and as soon as the harvest from white clover and basswood is over, all such queens are superseded by removing them and giving a ripe cell from my best breeding queen. Then, if, 15 days later, I find this young queen laying, I know that such colony is all right as to queen, and that, as a rule, such a colony will have plenty of young bees for wintering in the best shape.

Having the queen matter attended to, I wait till the buckwheat bloom is mainly over, which, in this locality, is from August 25 to September 5, when I go over the whole apiary and *know* that all colonies have honey enough, or are fed till they do have, the feeding generally being done by setting in combs of honey saved for this purpose, through having a few colonies do all their work during the surplus season in upper stor-ies.

The point which seems to have the greatest bearing on successful wintering is to begin early enough so the bees will be enabled to get their winter stores near and around the cluster of bees in time for them to settle down into that quiescent state so conducive to good wintering, prior to October 20. To arrange these stores and properly seal them requires warm weather, hence all will see the fallacy of putting off caring for them till cold weather arrives.

Heavy combs of honey may be set in any hive during the fore part of September, where the colony is short of stores, setting this comb where it is the most convenient for the bee-keeper, with the assurance that before cold weather sets in, the bees will uncap the proportion of it which is required, and bring it up around the cluster in just the shape they wish it for winter. But, set in such combs during November and December, and they must be gotten close up to the cluster if any of the honey is removed, and, even, then, it is often allowed to remain just as it was put in till some warm spell in winter allows the cluster to expand sufficiently to warm it up and carry it where the bees wish it. I have known colonies to starve to death with such combs of honey almost touching the cluster, through a period of extreme cold, because they had eaten up the little honey they had within the immediate reach of the cluster, and the cold prevented them from moving out sidewise on to these combs of frozen honey.

Probably the easiest way to know to a reasonable certainty that all colonies have sufficient stores for wintering is to prepare a hive with empty combs which are as aged (aged combs are the heaviest) as any we have in the apiary, and weigh this hive filled with combs. To this weight add 3 pounds for the weight of the bees; or if brood-rearing has not ceased add 3 pounds more for brood. Suppose your hive of empty combs weigh 25 pounds, you will call the weight you are to figure for each hive less the honey, as 28 pounds, where there is no brood in the colonies; or 31

pounds if there is brood in the hives. Now, it is generally believed, that no colony wintered on the summer stand, should start the winter on less than 25 pounds of honey, and that 30 would be better; and so we weigh our hives having colonies of bees in them which we intend for wintering, 53 pounds is as little as should be allowed, while 58 would be better; or, 61 if the colonies have brood. As the hives are weighed, the weight of each one is set down on a piece of section, and this tacked to the hive, so that after the weighing is over, I can go through the apiary and know for the looking just what each colony has for winter.

To save a second going over to look at all the pieces of sections, where any colony has sufficient stores, a small stone or a piece of brick is placed in the center of the top of the hive, which tells me at a glance over the hives, all of those which need no further looking after. All that do not have this stone on are looked up, and frames of honey given them till they have sufficient.

Suppose we come to a hive which has the weight of 45 pounds marked on it. We will go to one of the hives having frames of surplus stores, and take out 2 frames, the combined weight of which will probably be 12 pounds, and carry them to this hive. We will now open the hive and take out 2 of the very lightest combs, and put those we brought in their places. These combs taken out may possibly contain one or 2 pounds of honey, but as we have brought 12 pounds instead of the 8 needed, we are all right, as we wish that each colony should have 25 pounds or more. In this way we keep on until all have the required amount, when the bees are ready for winter, as far as good queens, number of bees, and honey, are concerned. If we do not have combs of sealed honey, of course, other feeding must be resorted to, but if all are anything like the writer, *once* feeding any liquid poured into a feeder, will suffice for all the rest of their bee-keeping life. The combs of honey are so easily obtained, by a little forethought during the harvest, and are so easily used in preparing colonies for winter, that I cannot think of going back to feeding liquid food under any consideration, short of an entire failure of the honey crop.

Reader, if you have never done this preparing for winter thus early in the season, or have never used full combs of capped honey for winter feeding, give it a careful trial, and, my word for it, you will not be guilty of using any of the slipshod ways again.

Borodino, N. Y.

A Crippled Bee-Keeper and His Apiary

BY JESSE G. COCKRAM.

I began bee-keeping in the old-fashioned way, like many others, not knowing anything about the new method, etc. I kept my bees in this way for about 11 years, getting just a little honey to eat sometimes, and a few pounds of chunk honey to sell now and then when they got rich at robbing time, which, according to the old rule, was about June. But



CRIPPLED JESSE G. COCKRAM IN HIS APIARY.

it very often happens that bees are not rich at this robbing time. Then the old-fashioned bee-man has to wait until next year, or kill his bees in the fall of the year and take all they have laid up for winter, destroying good colonies of bees that would very likely be worth hundreds of dollars in a few years if permitted to live, just for the sake of a few pounds of honey.

Let me say right here—suppose you get \$5 or \$6 worth of honey and beeswax per colony at "killing time," that is surely all you will ever get from them in all time to come. My bees last year averaged 50 pounds of good surplus section honey per colony. Fifty pounds of honey at 12½ cents per pound is as much as any one generally gets from the very best and richest box-hive when he kills the bees and takes it all. I get this much by working my bees in the new way, and I keep my bees alive to get that much from them next year. Count up then what a colony of bees is worth. Just suppose it to live 10 years in a good frame-hive, averaging 50 pounds of section honey per year, and selling it at 12½ cents per section (\$62.50); and this is not all yet. The swarms from this colony for 10 years, and all their increase and honey, too; take this into consideration, and then you will begin to find out that it surely does not pay to kill a good colony of bees at all. No, indeed, it surely does not pay to take that sweet, useful life away. I never expect to kill another colony of bees. I wish I had never killed any.

Get good modern hives and transfer your bees into them, if you have them in box-hives or log-gums. Do as I have done, and save your bees for many years to come, and just watch them go to work for you, bringing in some 25, some 35, some 45, some 50, some 60, and some 75 pounds of honey per colony in one season, and have plenty to winter on besides, but if there happens to come a bad season, so that the bees can not pull

through, feed and take care of them until they reach a good season. Be faithful and merciful, and the Lord will bless you.

Yes, I would rather work with bees than at anything else. I just have a love for the bees, and have had from childhood. I have crawled off into the woods many times and hunted for wild bees. I love to transfer bees from old trees into frame-hives, just to see them go to work where they can do well for me and themselves also; where I can remove the honey out of their way, and furnish them more room, just as they need it, and feed and take care of them, if they happen to need any feed.

I haven't walked for 32 years. You see by the picture the way I cross my legs when I am crawling about. But I do not let my legs remain crossed at all times. If I were to uncross my legs and sit on the bench, you could hardly tell in the picture that I was a crippled man. I work at the shoe-trade some through the fall and winter. I can uncross my legs and lay my feet on the back of my neck. I am strong in the other members of my body. I believe the lost strength in my feet and legs has gone to the other members of my body. My legs are small, but I have the right feeling in them, just the same as I have in my arms and hands, and they do not pain or hurt me any. If I let them remain crossed too long they get tired, then I have to uncross them and let them rest. I can climb trees with my legs crossed as you see in the picture.

Woolwine, Va.

Moving an Arizona Apiary

BY W. O. COREY.

The picture I am sending was taken in April. The apiary is located south of the Mule Mountains, about 3 miles from the famous copper camp Bisbee, and about 5 miles from the Mexican

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line. A description of this country and of the moving of my apiary may be of some interest.

January 8, 1908, I bought 129 colonies in double hives, together with extractor and supplies. We hauled them in big wagons six miles to a railroad where we put them in a car, and the road was none of the best, either. To fasten the bees we nailed the bottom and top on the hives, then nailed over the entrance a piece of wire screen. I found that 2 pieces were the best, cutting one strip longer than the other, and nailing it on first, only leaving a small entrance, then a piece a little longer than the opening was easily nailed on. In a short time we nailed all up except this opening the day before we shipped them. Then in the morning, early, we closed them all in.

I shipped them 42 miles by railroad, then hauled them a short distance to where they now stand. They were nailed up 3 days and 2 nights, I liberating them late the third day. I never lost a single swarm, and but a few bees. I consider that was good luck. I would have been satisfied if I had lost 20 colonies, considering the journey. The weather was warm in the daytime. In fact, we have no cold weather here, some even using hives 3/8-inch thick, with no shelter in winter. We seldom have over 2 inches of snow in a winter. This year was an exceptionally dry one. We had cold northwest wind all through April, May and June. In June and July it was very hot. From January until the middle of July we had no rain at all, it being the driest season in 13 years. Since the middle of July we have had our rainy season, which has brought out the flowers in abundance, and the bees have done well, since we have mesquite, century plant or muscal, cactus, and lots of different varieties of mountain plants that yield nectar.

I have increased to 150 colonies; have had several swarms come to my yard from the mountains. There are plenty of bees here in the mountains wherever they can find water. I have colonies that have stored over 40 pounds since the rains started.

I have noticed several articles in the *American Bee Journal* as to priority rights. I will tell you how I settled it here. One of my neighbors (a good-

natured fellow) had 2 or 3 colonies. During the warm days of the spring my bees commenced robbing his. Before he noticed it they "had cleaned him out." In a joking way he said he had even to burn his hives to keep my bees from carrying them off.

I do not consider this the best means to settle it, but it worked in this case. They might not come in this direction next time.

Don Luis, Ariz.

Locating an Apiary—Pollination, Etc.

BY PROF. A. J. COOK.

There is no one question that ranks in importance, or which should receive more thoughtful consideration by one just starting in bee-keeping, than that of location. Of course, one's surroundings of people, scenery and climate are important, but one can hardly go amiss of pleasing prospects in these lines, anywhere in our favored country, and so we have only to look to it that we secure the conditions that make for success in our chosen line. At the present time we have knowledge that makes it possible to select wisely in relation to this crucial point.

We now know that excessive rains, and even more—drouths—are inimical to nectar-secretion, and so make against any large production of honey. In nearly all sections, where we depend upon natural honey-plants, like white clover, tulip, linden, sage, mesquite, etc., we are always more or less dependent upon the rain-fall, and so can have no surety that we will have favorable seasons, and get a crop. But even supposing that the rains are rightly gauged, and we have everything just to our liking, yet the cold of the spring and early summer, especially if attended with harsh winds and heavy fogs, will stay the secretion of nectar, and work of the bees, so that we will still lament the absence of honey. In our quest, then, of the ideal honey location, we must seek some section where both these handicaps are wanting.

In Nevada, Central California—the great San Joaquin Valley—Arizona,

Colorado, the County of Imperial and the Coachella Valley in Riverside County, California, we have our honey-plants in cultivated crops, like alfalfa, beans, melons, asparagus, and various kinds of fruits. These are not dependent upon the rains at all, but are kept in full vigor by irrigation. Thus we are sure that we will have the conditions for full nectar-secretion, and we have gained the first essential point.

Again, these sections are inland valleys, where the cold and damp, and the blighting winds, are not prone to come, and so the nectar-glands are not blighted, and the bees are not forced to stay in the hives. Have we not, then, in these locations the best sections for a sure honey-production of any section of the world? I have long thought so, and the experience of the last years seem to make this surmise a certainty.

BEES AND POLLINATION.

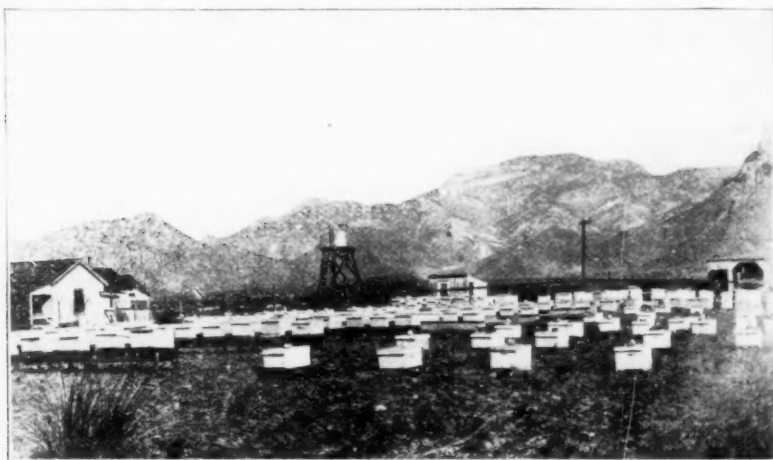
Despite the many excellent articles in our agricultural press, regarding the necessity of pollination of plants, and the valuable service of bees in this work, I am sure that the importance of the subject is not at all appreciated at its real magnitude. We do not practice intensive agriculture as they do in Europe. Our rich virgin soil, and general thrift as a people, make it unnecessary, and so we are content to get the half loaf, when the full-sized one might as well be secured.

Who has not seen far too often the dwarfed and deformed strawberry and blackberry, and even the pear and apple, and has rightly divined the cause? Do we realize, as we should, that this imperfection, and the more frequent entire absence of fruit, is the result of failure of bees or other insects to cross pollinate the fruit? I am persuaded that many fruits will not bear at all without this important function on the part of insect pollinators, and the great part of this work must be done by the bees of the hive, as there are by no means enough of the other pollen-carrying insects to do the work.

Other plants will bear when all conditions are favorable, but will refuse to do so when weather or climate lays a heavy hand on the growth and vigor. Such plants will not refuse when the flowers are cross-pollinated. In some cases a part of the bloom will be fertile to its own pollen, while other will be sterile. The deformed berry is the result of only partial pollination. Gnarly apples and pears are not unfrequently the result of the same lack of pollination.

I make bold to say that the time will come when science will be so well understood that special pains will be taken to secure enough bees in every agricultural section so that every fruit and tree will do its best. If every farmer would select out one child, and give him every opportunity to study and manage bees, giving him or her the entire proceeds of the hive, we would not only have many more of the children of the farm held to the farm, but we would have a greater gain in the better accomplishment of this all-important work of cross-pollination.

In the olden times almost every farm had its few colonies of bees. True, these



GOLDEN APIARY OF W. O. COREY, DON LUIS, ARIZ.
(Mountains only 2 miles away.)

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were in old box-hives and were poorly managed. This condition may well be restored, except that the bees should be kept in the best of the improved hives, and managed in the most improved manner of our best apiaries of today.

HONEY CROP NOT A TOTAL FAILURE.

The abundant rains of last winter gave us great hope of a bountiful honey harvest, in almost all parts of our State. Especially was this true in our lovely Southland. True, the rains were not as heavy as in some years, but they were so timely that we had great hope. But with the spring and early summer came very cool days and nights, with cool breezes, and so the nectar-glands were paralyzed, and we secured very little honey. Now, for two years, we have experienced these conditions of cold and damp, and have lamented a honey failure.

But this year we are not entirely desolate, as later warm weather came and we will get quite a crop, after all. In some of the more protected canyons the crop has been reckoned by the car-load. In parts of the State the cold and winds did not prevail, and the harvest has been fine. In all sections July and August have done something to make up for the failure of May and June. Thus while the season is generally poor—yes, very poor—still there will be quite a showing for our State, after all.

ROBBER-FLIES.

These great dipterous or two-winged flies are very common in Southern California. We have both types—the great black ones with their long, slender bodies, and the yellow hairy ones, much like the bumble-bees in form and appearance. We can but admire these brave robbers, for they kill many of our worst insect pests, and their courage in seizing even the worker-bee is surely to be admired. I recently saw one such capture and struggle. The fly grasped the bee with its strong legs, and held it despite the struggle and masterful effort of the bee to escape, and at once proceeded to insert its great, strong rostrum or beak, and to suck bloodless and lifeless its unwilling victim. It is to be regretted that these flies thus maraud on the workers of the hive, but as they do so much good we will not treasure it up too seriously against them.

Claremont, Cal.

Beeswax and Digestion—Increased Sale of Honey

BY DR. G. BOHRER.

On page 269, under the above caption, Dr. C. C. Miller criticizes my article on page 241. Part of it he does not find fault with, and I rather think that when he comes to understand it fully he will accept about all of it as not much out of joint. He seems to think I am upsetting the arguments of Rev. R. B. McCain on the same page, and just before mine. Now, please, Doctor, read the McCain article again, and you will learn that he has reference entirely to the adulteration of comb honey. And he is entirely correct. But he does not say one word about bee-sting poison.

But you claim that according to my statements, bee-sting poison is sure to be absorbed by the honey in the cells.

In this you are in all probability entirely mistaken, as the particles of poison expelled by bees, when their hive is jarred, most likely never reach the honey in the cells at all, as the bees never put their feet nor the tips of their bodies into the cells, nor dip them into the honey. But without doubt, it is spread over the bees, and in moving about over the combs a part of it is with next to no doubt spread over the surface of the comb; and, as I have stated on more than one occasion, is taken into the human stomach when eaten with the comb, which, as you know, in a few rare instances, produces spasmodic colic. And, Doctor, you know such people never buy honey to use as food for themselves. So that you, as a comb-honey producer, can not get rich selling them comb honey.

But if I am not entirely mistaken, in uncapping honey with the uncapping knife the bee-sting poison is removed, so that when the honey is extracted it is free from bee-sting poison and wax. The latter being wholly indigestible and in no way available as an article of nutrition to the human body, whatever action it may have or influence it may exert upon the digestive organs, is entirely of an irritating character. And the extracted-honey producer may be able to sell this class of persons honey. See the point, Doctor?

And as to the matter of feeding the little honey from the cappings back to the bees, becoming the means of mixing the bee-sting poison with the surplus honey, you need not, I think, borrow any trouble, as bees, you know, are fed for two general purposes—the one to carry them through winter, and the other to stimulate and aid them in brood-rearing.

You ask me how I know that bees invariably thrust out their stings, and that poison is expelled upon any jar of the hive. In reply I will say that I have seen it so often that I feel fully justified in arriving at such a conclusion. And in the presence of your experience, I feel somewhat surprised to learn that you doubt the correctness of this view.

You also say, "Please tell us how the spread of your facts is going to increase beyond any demand heretofore known, the sale of honey." I never said your facts; and whatever this remark may be intended to mean, you said it. But, Doctor, I did say, and now repeat, that in all I have said or written, I have done no guessing in regard to the influence of comb honey upon a very few persons, as regards its producing spasmodic colic. And I will also say that I feel quite confident that, as the people become acquainted with the requirements of the pure food law, and the effects of a rigid enforcement of the same, the sale of honey, both extracted and comb, will be very largely increased. People have for ages been acquainted with the excellent qualities of unadulterated honey, but you well know that for many years the custom of adulterating honey with glucose has been conducted upon such a gigantic scale that pure extracted honey was regarded as difficult to obtain in the markets; and

that this must exert a demoralizing influence upon the sale of honey, you certainly understand. You are also aware of the fact that many people were led to believe that honey-producers manufactured comb, filled it with artificial honey, and sealed it so nearly as the bees do that it was difficult for even an expert to detect the counterfeit.

And, further, as to the spread or reprint of my article in question, I have been written to from a distance for permission to publish it in local papers, which has been done. As to how many papers my print it, I have no means of knowing. I am, however, informed that where it was republished, physicians endorsed my views, and groceries were selling honey in larger quantities. So that I perhaps need have no deep regrets to express, nor apologies to offer, for having written the article in question. I am also convinced that I can produce more honey, and with less labor and expense, in the extracted form than I can in the comb. And to say the very most in behalf of comb honey, the wax or comb is to honey what face-powder is to the human complexion—simply ornamental.

Lyons, Kans.

Illinois State Convention

The Illinois State Bee-Keepers' Association will meet Nov. 19th and 20th, at the State house in Springfield. We may have no program except what will be made up by the best of our bee-keepers—which is always better than a set program, if those present are alive to their opportunity.

The Illinois State Bee-Keepers' Association has made arrangements with the State Board of Agriculture to have bees handled in cages at the State Fair. In one cage, for the purpose, a foul-broody hive will be shown up. Louis Werner, of Edwardsville, will do the manipulating. JAS. A. STONE, Sec.
Rt. 4, Springfield, Ill.

Northern Illinois Convention

The annual meeting of the Northern Illinois Bee-Keepers' Association will be held in the Court House in Rockford, Ill., Tuesday and Wednesday, Oct. 20 and 21, 1908. All interested are invited to attend. B. KENNEDY, Sec.

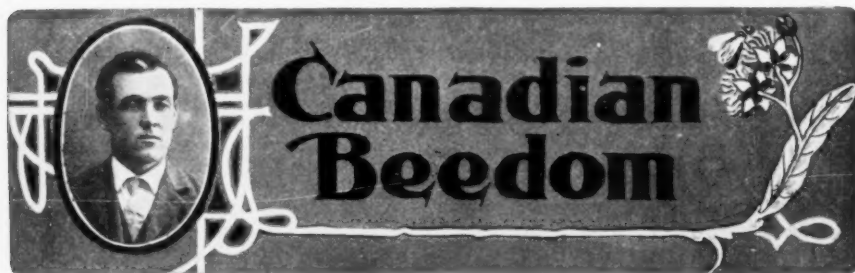
Cherry Valley, Ill.

The Panhandle Convention

The Panhandle Bee-Keepers' Association will meet in Knights Golden Eagle Hall, corner 38th and Jacob Sts., Wheeling, W. Va., Monday, November 16, 1908. W. L. KINSEY, Sec.
Blaine, Ohio.

Bee Journal for 1907—40c.

We still have on hand some complete volumes of the American Bee Journal for 1907, which we will mail for 40 cents each. The first half of that year the Bee Journal was issued weekly, and the last half monthly, which would make 32 numbers. And all of them for only 40 cents! Surely this is a bargain for any new reader who has become a subscriber this year.



Conducted by J. L. BYER, Mount Joy, Ont.

Small Yield from Buckwheat.

On page 273, I stated that "prospects" were good for a flow of honey from the buckwheat. Unfortunately, dry cold weather ensuing just after that was written, knocked out the yield we were expecting, and we have to be content with a meager 15-pound per colony yield. However, brood-chambers are crammed full of buckwheat honey, so feeding will not be necessary.

After all, our surmise was correct in so far as "best late flow" in our locality, as our crop from buckwheat, small as it is, is the most we have ever obtained from that source. Be it understood that is, is the most we have ever obtained plant has been grown in our section.

A Buckwheat Story.

In connection with buckwheat as a honey-yielder, the writer a few days ago had a hearty laugh over a story told him by a farmer bee-keeper who also raises poultry quite extensively. The first year that buckwheat was sown near his place, when the plant came in bloom nicely, a decidedly bad smell was noticed about the hives in the evenings. Not being acquainted with the peculiar odor of freshly-gathered buckwheat honey, my friend came to the conclusion that some of his chickens had died under the hives and were responsible for the trouble. Two or 3 evenings he and his good wife searched among the bees in an effort to find the dead chickens that were so offensive, and failing to find them, were at a loss to account for the peculiar and unpleasant situation, for, as they said, "their neighbors were turning up their noses in disgust every time they went past the place."

One morning when examining a strong colony, the odor was located without a doubt as coming from the inside of the hive, and lo, the mystery was solved at last. "The bees had foul brood." That same day, a well-known bee-keeper happened to be passing, and our friend hailed him at once and told of his "misfortune." Needless to add, that when Mr. Bee-Keeper came and examined the bees, a hearty laugh all around was in order.

A Very Dry Time in Ontario.

Today (Sept. 22) we extracted the buckwheat honey at the Altona yard. The day was hot, and as a consequence of bush fires off a distance from us, a heavy pall of smoke pervaded the atmosphere all day. Whether the smoky air was responsible or not, I can not say, but for some reason, not a bee would offer to rob. Scarcely a bee was flying,

and hives could be opened, bees shaken or brushed off the combs with as much comfort as if a heavy flow of honey was in progress. A wet cloth over the comb box was used in the morning, but even that precaution was not necessary, as the bees would pay no attention to anything beyond showing a desire to get back into the hives and *staying there*. As we have never before had such an experience, we can attribute their actions to nothing else than the smoky atmosphere.

Let me say that we are experiencing one of the worst drouths that has ever occurred here, no rain since Aug. 5, and no signs of any to date—over 7 weeks. As near as I can learn this condition is pretty general over Ontario.

"Tall" Colony Yields 418 Pounds.

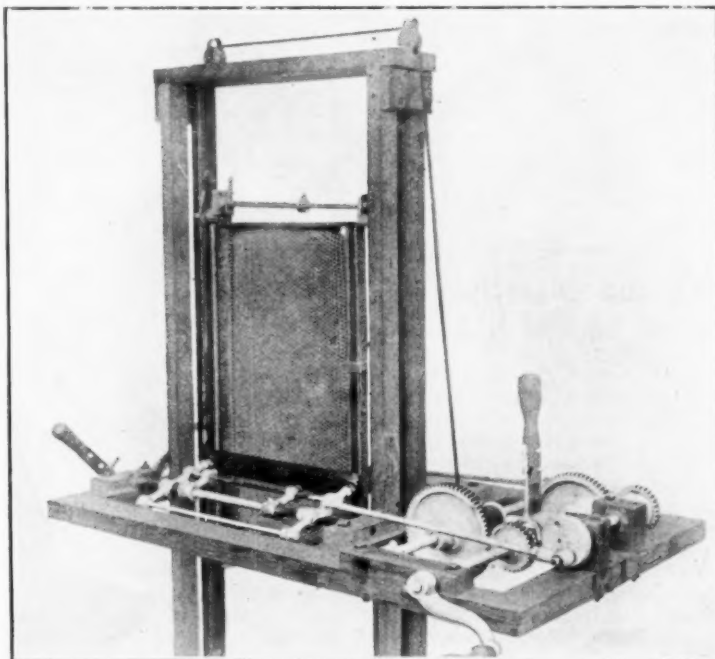
That 8-super colony shown on page 274 has done good work as is evidenced by "final returns." Since writing those items in connection with Mr. Free's apiary, I have had the pleasure of again being in the yard. Right after a big crop of clover honey came the heaviest yield of dark honey they have ever had. This crop came from the boneset that grows in a big marsh along the river Trent. The honey, the flavor of which

(in the writer's opinion) is delightful, is, if I am correct, not often heard of here in Ontario, and as near as I can find out the plant is not generally counted on as much of a yielder.

Returning to that big hive; the history for the season is as follows: The colony, in a standard 8-frame Langstroth hive, was wintered in the cellar, and received no help in the way of brood or bees from other colonies. When the brood-chamber was full, the half-depth super shown, filled with full sheets of foundation, was given and the queen allowed use of all right through the season. On September 12, the boneset honey was taken from the bees and carefully weighed, and this added to the clover honey extracted earlier, made a total of 418 pounds. In addition, the half-depth body is capped solid, and will be left for winter. The bees are leather-colored Italians, and the queen was bred from a mother secured from a well-known queen-breeder. The average of the whole apiary this year is something over 200 pounds per colony.

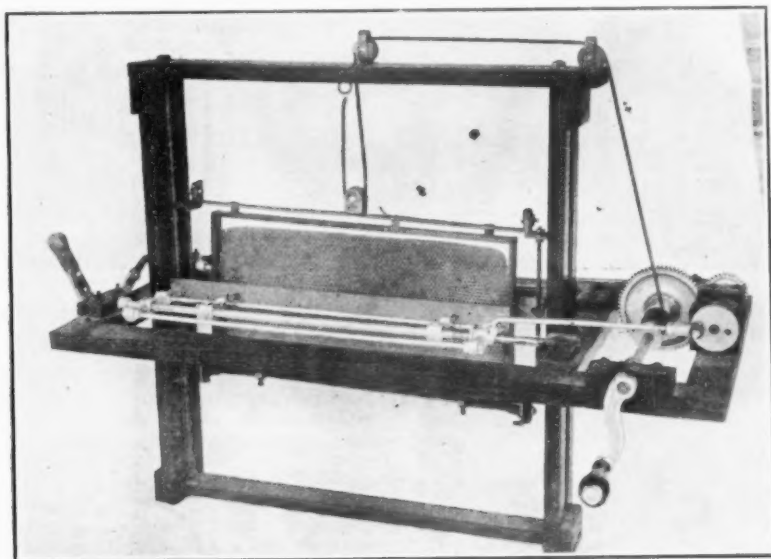
Bayless Uncapping Machine.

Mr. Wm. L. Bayless, some years ago, invented and perfected the reversible honey-extractor. For some time he worked on a new machine for uncapping. It was done chiefly in his spare moments, as the enterprise was entirely his own. It can be truly said that at last he has it perfected. It is a very ingenious yet simple device. We believe he has the correct principle beyond a doubt. The machine is built in two ways, as will be seen by the illustrations, A and B. One will uncap the comb from end to end, while the other will take the comb lengthwise and cut the capping from the bottom up to the top bar. The machine is operated by a small crank, and all parts driven by



BAYLESS UNCAPPING MACHINE—STYLE A.

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BAYLESS UNCAPPING MACHINE-STYLE B.

cog-wheels and leather-rope belting, similar to that used on sewing machines.

The knives, made of good cast steel, work backward and forward with a good cutting motion, while the frame moves downward or upward, as the will of the operator may direct. The knives are double-edged, and will cut as the comb passes either upward or downward. It is so adjusted as to cut a very thick comb or a thin one, or a comb the thickness of which varies. All these variations are absolutely under the control of the operator.

The comb must be a little wider than the top-bar in order to use style A effectively. This is the machine that cuts from end to end.

Style B will cut any thickness of comb, provided that the end-bars are not too wide. But where top-bars and end-bars are made with a view to the use of this machine, it may be freely said it will uncap anything in the shape of a Langstroth. In fact, the machine can be built to suit any particular-sized frame which may be a special hobby with any particular bee-keeper. To Mr.

Bayless belongs the discovery of the "principle" and "action." This may now be adapted to any size of frame.

We desire to say that Mr. Bayless has not written this article, nor dictated it in any way. He is an extremely modest man, and as yet has made no effort to place his device upon the market; in fact, we believe he scarcely realizes what a good thing he has. He will, however, protect his machine with a patent. When in the city a short time ago, Mr. Wm. McEvoy, and Mr. A. Comire of Quebec, called upon Mr. Bayless to see the machine. Mr. F. P. Adams and the writer accompanied them. Mr. and Mrs. Bayless received the party cordially. The machine was shown and closely inspected. Mr. McEvoy was enthusiastic in his praises, and ordered one on the spot. We unhesitatingly declare that we believe the machine will be a success.—Canadian Bee Journal.

Look Out for Canucks at Detroit!

Ho, for the "National" at Detroit! As nearly as I can learn a large number of Canucks will be present, and quite possibly be in "the majority," and as a matter of course, they will vote and have the word "National" changed to "International." See?

Joking aside, this scribbler, for one, is looking forward to a whole lot of pleasure in meeting a host of friends that he has never seen. With this thought in mind, a glance at the clock reminds me that it is past bed-time, so I "ring off," with a "hope to meet you in Detroit, October 13."



By W. A. PRYAL, Alden Station, Oakland, Calif.

Dahlias for Honey and Pollen.

An old-fashioned flower that has almost suddenly come into popular favor again is the Dahlia. We older folk well remember in our childhood days that our parents cherished those formal flowers; how stately they were and how profusely they bloomed! But the advent of the cactus-flowered varieties has added new interest to the flower, and to-day we have some gorgeous specimens—flowers of large size and almost fantastic shapes. As a boy, I liked the old dahlias; to-day I like them better than ever, and I think the newer sorts vie with the rose in beauty. They are free from disease and few insects prey upon them—and those only of the "chewing" kind, which can be easily destroyed.

The past season I have had quite an

array of plants and colors galore growing in my garden. I am much pleased to notice that bees seek the flowers and work upon them the day through. They gather both nectar and pollen. With us the plants usually begin to bloom in August and so continue until December, thereby adding to our bee-pasturage at a time when nectar-secreting flowers are much needed. Of course, I do not advocate the planting of these flowers for honey alone, but there is no reason why every bee-keeper's garden should not contain a number of these pretty and showy flowers.

Outdoor Feeding of Bees.

Do not encourage a bee to become a robber; better kill the bee. A few days ago I visited an elderly apiarist

and to my surprise I saw a milk-pan half full of honey sitting on an old box under an oak tree close to his colonies. Of course the bees were swarming on the honey, and hundreds were drowned in the liquid, as no pains were taken to put floats in the honey to protect the bees. Bees all bedaubed with the sticky stuff were crawling about the apiary, nearly all of which would never reach their hives.

To say nothing of such a method being a wanton destruction of bee-life, it is also worse on the bees in another way. The very smell of honey so easily obtainable right in the apiary at once starts the bees robbing, and woe to the colonies when the bees get right down to a genuine case of robbing in the fall of the year. I venture to remark that no bee-keeper, even of the most perfect disposition, would long wear his best smile when he found his bees at such work in full tilt. How I should like to see Dr. Miller amid a robbing crew; if I did not find him using language as hot as the time the bees were making for him, I venture that beautiful and peaceful smile Editor Root so recently pictured in Gleanings would disappear, and the good Doctor would be wearing another face! But don't let it be supposed for a moment that the Doctor would say things unpleasant; I feel sure that he would let his face do the talking.

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The Wide-Open Hive Dangerous.

When visiting a bee-keeper recently I was astonished to find that many of his colonies were in hives that were almost as open to the weather as a saw-mill. When I remarked that such wide-open hives seemed to be a standing invitation for robber-bees to "just walk in and help yourselves," I was told that the robbers did not seem to discover the big openings. I suppose one reason such exhibitions of the contents of the interior of the hives did not cause serious trouble was owing to the fact that all the colonies in the apiary were well separated from each other. I know that where hives are near together it is almost impossible to open one hive without having the bees from adjoining hives make an onslaught on the one undergoing manipulation. I believe that an "open apiary" is as demoralizing as an "open town." I would set it down as a motto for bee-keepers that the secrets of the inside of each colony should be screened from the view of the outside world as much as the secrets of one's household.

Loss of Heat in Hives.

Speaking of induly ventilated colonies reminds me that the robbing they might provoke is not their only bad feature. In winter it is well to conserve all the animal heat of the colony, especially in a cold climate. The bees will build up faster and store more comb honey. In climates like that found in a large portion of California it may not make so much difference whether the bees are in a close, snug hive or not, so long as the bees are good fighters and are well protected from the rain. Rain, moths, robbers and foul brood are the bane of the bee-man.

The Height of Hive-Stands.

Some authorities advocate low stands for the hives, while some recommend tall ones. With a couple of exceptions, all my colonies are near the ground—some 4 inches above terra firma. In our climate I find this sufficiently high for hive-stands. I know a bee-keeper who has nearly all his colonies resting on the earth. No alighting boards are required. He claims that he has found no serious results follow from having his bees so placed. Ordinarily this might be so, but it has many ill features. In the first place, the bottom-boards will rot sooner; they will be damp and disagreeable for the bees in winter unless the under side is tarred; if the ground slopes to the entrance surplus water during a rain-storm will run into the hive; grass will clog the entrance far worse than if the hive were elevated; insects and reptiles may crawl into the hive and molest the occupants; skunks have better opportunity to coax the bees from the hive and destroy them; and lastly, but not wholly, the bee-keeper's poor back has to be subjected to unnecessary stooping when working over the hive upon the ground.

So give me the hive off the ground—the higher the better, perhaps.



Report of the Chicago-Northwestern Bee-Keepers' Convention.

(Continued from page 273.)

SWARMING INDICATIONS.

"What are some reasonably certain ordinary indications of swarming?"

Dr. Miller—None.

Mr. Taylor—Bees in the air!

Dr. Miller—That is no sign. Bees are likely to be in the air anyway. I don't believe that there is any outside sign upon which you can depend, as to whether the colony is likely to swarm.

Mr. Whitney—I was watching one of my colonies a few years ago. I saw an unusual commotion on the part of the bees. Started for a queen-cage. I believed they would swarm in about 20 minutes. I had just time to catch the queen. I believe there is an outside appearance.

Dr. Miller—There is a sign that within 24 or 48 hours a swarm will issue. A prime swarm will not give any sign. But an afterswarm will give a sign. You can hear the young queen piping. Then you will know that a swarm is likely to issue within 24 hours. Only one queen will pipe. Three or 4 may quahk, but only one will pipe. The queen that is free will make a shorter noise than the others.

Mr. Whitney—Another outside evidence occurs to me. I had a frame out one time looking it over. There was a young queen on it, making that piping noise. She poked her head into a cell and made that noise. I was quite certain that a swarm would issue the next day, and I found it so.

Dr. Miller—The free queen has a higher pitch than the others that we say are "quahking." Those who are quahking commence with a shorter tone. The first one is a long, high note, and then a little shorter, and a little shorter. They will be answered by the others with a lower pitch and the different tones that they make will be equal in length. That's the way they used to do it. Maybe they don't do it now.

HONEY MARKET IN ILLINOIS.

"Will Dr. Eaton give a few words about the present condition of the honey market in Illinois?"

Dr. Eaton—I must confess that I am not quite so well posted on the honey market in this city now as I was 2 years ago. However, in my work as an analytical chemist, I sometimes inspect the grocery stores of the State, and my own work in that line leads me to take quite an interest in seeing what is on the market. And naturally I get, now and then, samples of honey for analysis. I always take a great interest in the meetings of

this Association, and also the meetings of the bee-keepers wherever I may happen to be, my first interest having been with the Minnesota State Bee-Keepers' Association. And whether I am in official work or not, I like to drop in at those meetings. I always find something of interest to me as a chemist. I might say that this Association is largely responsible for the Illinois State Pure Food Law. Had it not been for this Association and the State Association, I don't believe there would be an Illinois Pure Food Law. Those two associations made possible the State Pure Food Law.

When this Association first took hold of the work, before the State had a pure food law, they gathered a number of samples—40 or 50, I believe—and I did the analytical work. We found about 33 1-3 percent of those samples adulterated. They were all sold for pure honey. That same proportion of adulteration kept up for 2 years after that. The law was not very vigorously enforced at first. The penalty was not enforced at once. Therefore, the adulteration did not decrease immediately. But the last few years the adulteration began to grow less. Only one sample of adulterated honey was found the last year of my connection with the Pure Food Commission. We practically drove adulterated honey off the market. Now there is quite a good deal of mixtures of honey on the market. It is, however, generally labeled in conformity with the National requirements, stating the percents of the mixtures, whether it be cane sugar or glucose. But that form of adulteration has probably grown in the last few years; that is, the labeled mixtures, not the adulteration. It is probably due to the higher price of honey and foods in general. We find quite a good deal of mixed honey on the grocery shelves. They can not be any very great detriment to the buyer who will buy pure honey in preference to mixtures if he knows what he is buying.

I suppose you all noticed the reports of the convention in France, where they spoke of a mixture of invert sugar with honey, and said that that article would enjoy a wide sale, and claimed that it is already being produced in the old country. That is, of course, an ideal form of adulteration. It is a form of adulteration that is going to be hard indeed for the chemist to detect. Honey is largely invert sugar, and if the adulteration is made of invert sugar, and flavored with honey, it will be very hard to detect. This applies to extracted honey. I know of no way to adulterate comb honey. I don't know that people have attempted to adulterate comb honey, but I would not like to say so off-hand.

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Whether it is profitable or not, I don't know.

This invert sugar, however, could be used only in extracted honey, and no one need fear to purchase comb honey lest it will be adulterated in that way. I don't know of any adulteration of honey with invert sugar at present. As long ago as 1887, Dr. Wiley, of the United States Department of Agriculture, got out a bulletin on honey, and mentioned several samples of honey which he said he thought were adulterated with invert sugar, and put them in a suspicious class. Mr. A. I. Root was well acquainted with one of the samples, and was certain that it was not adulterated with invert sugar. The invert

sugar can be made in two ways. First, by inverting the sugar with acid; and also by inverting the sugar by mixing with a ferment, or invertase. A very small amount of invertase will work very rapidly. Perhaps it will be used to adulterate extracted honey.

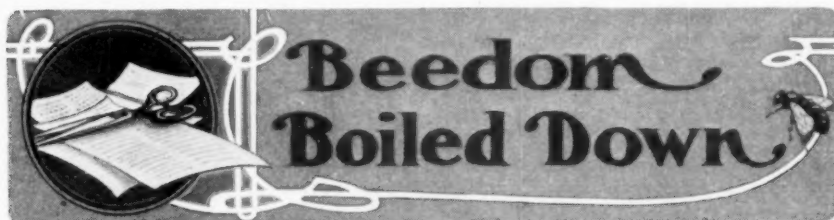
CROP REPORT FOR 1907.

"What is your crop report for 1907?"
Dr. Bohrer—Had no crop.

Pres. York—How many didn't get any crop this year? 6.

Dr. Bohrer—While we used the extractor and got some honey, we will have to feed it back.

(Continued next month.)



Three Methods of Selling Honey.

Mr. Townsend made a remark in last month's Review, the truth of which some of us have failed to realize, viz., "that it costs money to sell honey." If we ship our honey off in a lump to some wholesaler or jobber, it might be said in one sense, that it cost nothing to sell it; but look at the lower price that is received. If a man sells his extracted honey at wholesale for 8 cents a pound, when some retailer could pay him 9 or 10 cents, then this 1 or 2 cents less on a pound, for which he has sold his honey, is really what it cost him to sell his honey. Or it might be carried still further, by saying that, as the consumer pays 12 or 15, or 20 cents a pound, then the difference between what the producer actually gets, and what the consumer pays, is what it costs to sell the honey.

There are really three methods of selling honey, viz., wholesaling, jobbing and retailing. Most of the large dealers in honey are what might be called "jobbers." They buy at wholesale, in large quantities, at the lowest prices, and then sell it in job lots, at a slight advance, to bottlers and retailers. It has always been something of a wonder to me why more producers have not sought out and secured this jobbing trade, and thus saved the wholesalers' profit; and, still further, I have wondered why bottlers and retailers do not go direct to the producer, of whom they could often buy at lower figures than of the jobber. To be sure, it would cost the producer something, at first, to find out the bottlers and secure their trade, and the same might be said of an attempt on the part of the bottlers to buy direct of the producers, but in the end it would be advantageous to both classes.

I expect it is something like this: A producer does not know who are bottlers or retailers; he does not know of the wholesale dealers, that they are reliable, and, as a rule, when honey is

sold to them, there is no more trouble or anxiety. The retailer trusts the jobber and knows that he can get what he wants from him. Of John Jones, living at Oshkosh, he is not so sure.

For these reasons there will always be wholesale dealers in honey, and, for a large class of producers, it is well that they exist; but men who are adapted to the work can certainly make a good profit by reaching out and securing a portion of the jobbing trade—bottlers, retailers and those consumers who buy large quantities. It costs something to advertise, send out samples, write letters, etc., but once such a trade is built up, it is easily held at a slight expense.

There is still another step that many bee-keepers can take—that of putting up their honey in retail packages; and selling direct to consumers or to grocers. Not all bee-keepers are adapted to this, or live near the right kind of locality, but where the conditions are favorable, the retailing of one's crop of honey makes very profitable work for fall and winter months.

My plan is that of selling to bottlers, retailers, and large consumers. It fits my conditions the best of any plan, but, if I had the spare time in fall and winter that most bee-keepers possess, I should go one step further, putting it up in retail packages and selling direct to consumers. The field here is an excellent one, and I just ache at times to go at it and show what can be done in that line, but my hands are too full of other work to allow of such a thing.

Each man should study the matter thoroughly, and then adopt that method best suited to his conditions. Not every man can retail his own honey; neither can we all be our own jobbers. For instance, Mr. M. A. Gill, of Colorado, who produces about a car-load of comb honey each year, says it is more profitable for him to turn the honey over to some one whose business is that of

selling, while he will turn all of his energies towards the production of another crop.—Bee-Keepers' Review.

Bottom Starters Built First.

Last season we used on half of our colonies a $\frac{7}{8}$ -inch bottom starter, and over half of them were built at the bottom first, some not at the top at all. Of course, we had no honey-flow. But I find it the case always in the fall at the close of the honey-flow.—R. L. HALE, in Gleanings.

Signs of Queenlessness.

I wonder if one of the signs of queenlessness has ever appeared in print. Suppose you have a colony thought to be queenless to which you wish to introduce a queen. There is often a danger that, by some hook or crook, a virgin queen may be present, perhaps reared from a cell that has been missed, perhaps an interloper from elsewhere. If you find honey in pretty much all cells in the brood-nest not already filled with brood, you may feel fairly safe to introduce your queen. If, on the other hand, you find these cells empty, and polished so they shine, ten to one there's something in the hive that the bees respect as a queen. If you find honey in worker-cells, and drone-cells empty and shining, the bees are likely to have been queenless for some time, and perhaps laying workers are in contemplation.

[You are orthodox in all you say. We use these signs in connection with other evidences that may or may not be present in determining the condition of the colony; but strangely enough, very little, comparatively, has been made in print of the fact whether the worker-cells have been filled with honey or are empty and polished up clean. If polished, and no eggs are in them, it indicates that a virgin is present and will probably lay soon. Or the condition may show that a laying queen has just been let loose from a cage and will soon deposit eggs.—Ed.]—Stray Straws in Gleanings.

Does Buckwheat Yield in Clover?

This question was raised in The American Bee Journal by J. L. Byer, on page 236. Referring to the same, R. F. Holtermann says in Gleanings:

"I have had some experience in a buckwheat and clover section, and I have had the experience of other bee-keepers similarly situated. We have often found that the bees worked on buckwheat during the clover season. In my estimation an ideal buckwheat morning would be an ideal clover morning. It seems to me that, when clover does not yield well, buckwheat may; or if clover is not very abundant the bees will work on buckwheat. I have also found Italian and Carniolan bees less likely to work on buckwheat when they can obtain white honey. This latter has been my experience again and again."

Uncapping Honey.

Speaking of the Bayless uncapping machine, The Bee-Keepers' Review says:

"It is always risky, not to say unwise, to criticise a machine like this that one has never tried, much less seen, and I shall not attempt anything of the kind, either of the machine or of its work, but, nevertheless, I can't help wondering if those who have given so much thought to uncapping machines have ever seen combs uncapped under the most favorable conditions. Let the combs be those that have been in use a few years, until they have become quite tough and hard. Space them wide apart so that the bees will add wax to them as they fill them. This new wax will be soft and easy to cut, while the old comb beneath will furnish the firmness.

There will also be a sort of mixture of the two kinds of comb at the juncture where the knife passes through, thus the old comb will furnish enough of the hard material so that the part that is to be cut will lack the soft, stickiness that characterizes very new comb. Have the frames only $\frac{3}{4}$ of an inch in thickness, and space them wide enough so that there will be about $\frac{1}{4}$ or $\frac{1}{8}$ of an inch to shave off

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each side of the comb. It will be seen that one of the secrets of quick uncapping is in having exactly the right kind of combs in the right kind of frames. Have a sharp Bingham knife long enough to reach clear across the comb; yes, have two of these knives, and, when not in the hand in use, let them stand in a dish of water kept near the boiling point by a lamp stove. Have a sharp point, like the point of a nail driven up through a board upon which to rest the end-bar of the frame.

"Give me such conditions, and I would like to try a race with any uncapping machine into which the frames have to be placed and removed. One sweep of the knife, and the cappings from the entire side drop off. A flip of the comb, turning it upon the point of the nail, another sweep of the knife, and the cappings from the other side drop into the dish below."

Even should it turn out that Editor Hutchinson would be worsted in an encounter with an uncapping machine, there would probably always be bee-keepers with very few colonies who could hardly afford a machine, and such will read with interest the way Mr. Hutchinson does it by hand.

Size of Larvae for Grafting.

When using larvae to graft into cells, the beginner is told that he must select those of a certain age. But he is puzzled to know just how he can tell this from the appearance of the larvae. Here is something exactly to the point, given in Gleanings:

"Mr. Pritchard believes that any larva not yet curled up so that the two ends nearly meet is suitable for grafting, and he therefore selects the largest and finest-appearing larvae that are yet comparatively straight in the bottoms of the cells. Furthermore, whenever he is looking over the combs in the strong colony containing the breeding queen, and finds a small patch of comb in practically every cell of which eggs are just beginning to hatch, he marks this carefully by enclosing the space with large wire staples such as are used to fasten bottom-boards on hive-bodies, etc. Small sticks will not do, for the bees carry them away; but these large wire staples answer the purpose admirably. Two days later, when he is ready to graft, he takes up this comb which he marked, and selects the finest of the larvae between these staples. He is thus practically sure of obtaining what he wants."

Blacks Running Out Italian Bees.

No doubt many a bee-keeper has been puzzled to understand how it is that there is a tendency toward black blood, even in localities where Italians are specially favored. Light is given upon this point, as well as upon some other points in the following extract from a conversation with F. R. Beuhne, given in Gleanings:

"How do you succeed, Mr. Beuhne, in getting early drones from a select breeder in sufficient numbers so that all young queens in the early spring will mate with these selected drones?"

"The only satisfactory way I know of is to introduce those queens, from which we desire to rear drones, to strong colonies of black bees during the winter, having supplied such colonies with the necessary drone comb in the right position in the hive. As black bees will breed earlier in the spring than Italians, we obtain our choice drones much earlier than would be possible with even stimulative feeding."

"We find that our Caucasians will breed a hundred drones to the Italians one. Whether the Caucasians would be the equal of the black bees we could not say; but we believe that your suggestion of putting choice Italian breeders into stocks of bees of strains that will rear more drones than Italians, and earlier than Italians, is a good one. Now, Mr. Beuhne, it has been observed by bee-keepers of both continents and both hemispheres, that, where Italians largely predominate through selection in breeding, if the bees are left to themselves, and if there is some black blood

in the locality, all the bees in that locality will sooner or later degenerate back into hybrids or blacks. Do you account for this by the tendency in the blacks to rear drones in larger numbers, and earlier?"

"Yes, I do. In addition, we must bear in mind that blacks are usually allowed their own sweet will in the way of building drone-comb. There is also no check on the age of queens. Under these conditions, and the well-known fact that black bees can rear brood at a lower temperature, it is but natural that the race of bees in a given district should gravitate toward the black race. There is another thing in this connection; and that is, that the black bees (and that would include the drones), being less susceptible to cold, would be out in the air more than the yellow bees."

Failure with Foundation Splints.

In Gleanings, E. F. Atwater gives illustrations of combs in which foundation-splints have been used, and the bees have gnawed the foundation in two, in one case half way from the bottom-bar to the top-bar. Commenting on this Editor Root says:

"Figs. 2 and 3 do not give one a favorable impression of wood splints; but we are prepared to say in this connection that we saw nothing of this kind at Dr. C. C. Miller's apiary. He showed us comb after comb built from foundation stayed with wood splints, and these combs were as flat as a board, without any suggestion of wooden stays in the mid-rib; and what is more, they were filled out to and in contact with the bottom-bar. One strong claim made by Dr. Miller for splints is that, by means of them, one can use sheets of foundation reaching clear down to the bottom-bar."

State Entomologist and Foul Brood.

At the 20th annual meeting of the Association of Economic Entomologists, as reported in the Journal of Economic Entomology, a paper, which brought out considerable discussion, was read by Dr. E. F. Phillips, in the course of which he said:

"The present weak point in State inspection seems to the writer to be a lack of the proper kind of supervision of the inspection. The inspectors are usually good, practical bee-keepers, and are experts in the detection and treatment of disease. As a rule, however, they know little of the methods used in other lines of inspection and are equally uninformed on all other phases of entomological work which would be valuable for purposes of comparison. It would seem desirable, therefore, that apiarian inspection be under the supervision of the State entomologist; not that the entomologist himself should do the work, for he has enough to do, but that the inspector should be responsible to him. In fact, in most cases, a practical bee-keeper would be better able to handle disease than the entomologist who may not be trained in the practical manipulation of bees, which is an absolute essential to effective work. In Texas the State entomologist is also foul-brood inspector, but has 4 assistants who do the actual inspection."

"I would not have any of the previous statements interpreted as reflecting adversely on the present inspectors; their work commands the highest respect, with but few exceptions. The official entomologists may feel that such a recommendation tends to impose additional arduous duties on men already overworked, but apiculture is a branch of economic entomology, and the honey-bee, as a most beneficial insect, demands attention. The only reason for suggesting this supervision by the State entomologist is the belief that an entomologist is better able to direct in this work than any other State official. If the entomologist is also a trained bee-keeper, the efficiency of the work would be inestimably increased."

Specialty vs. Amateur Bee-Keeping.

Our occasional correspondent, Mr. L. E. Gateley, presents this criticism in the July number of the American Bee Journal:

"The attitude of various apicultural papers on certain questions pertaining to practical bee-culture, is at times quite amusing to the man who has for any time been engaged in the

production of honey. For instance, Mr. Hill says in the April Bee-Keeper:

"While The Bee-Keeper does not recommend bee-keeping as a money-making specialty, it believes that a vastly greater number of colonies than is now kept might be made profitable."

"How is that for a paper that stands second to none in advancing and holding out for the latest and most progressive ideas relating to intensive and extensive apiculture?"

I am unable to detect the remarkable part of the paragraph quoted by Mr. Gateley. Though it may appear obscure or illogical, or inconsistent to others, it appears very clear to its author and he takes occasion here to emphasize it. I believe that the number of colonies in the United States might be doubled and their culture might be made profitable, if they were distributed thoroughly and the owners' time bestowed upon them only when other more lucrative business did not suffer as a result. In other words, a small apiary well cared for during spare time is nearly always profitable. If Mr. Gateley would read more carefully he would note the distinction between bee-keeping as an avocation and bee-keeping as a specialty. The specialists who have succeeded are rare; and, though I wish he might do so, I venture the prophecy that Mr. Gateley will never own a national bank nor build a trunk line railway from the proceeds of his bees. It is well, in a way, that we have the enthusiast with us. A man should ever be enthusiastic in his calling, but when his enthusiasm is the cause of financial loss to his trusting friends his influence works no good, or, if good, it is offset by the preponderance of evil which it begets. One, or a half-dozen successful seasons with a limited number of bees should not blind us to the fact that the history of bee-culture, as a specialty, from the viewpoint of a money-maker is not encouraging.

Mr. Gateley's inference that the editors whom he criticizes are without experience may be a trifle weak, too. His experience may be more extensive than my own or than Brother Root's. Mr. Root has certainly had the opportunities, and I have no doubt they have been improved. As for myself my experience began in childhood and the present color of my hair indicates that that must have been some time ago. It has been my pleasure to be associated with some of the most extensive producers of honey, and to have the management of some of the largest apiaries in the United States, numbering their colonies by thousands, and to note by experience the conditions and possibilities on all sides of the United States, from the Atlantic to the Pacific and from Canada to Cuba; during all of which time I have been intensely interested in the upbuilding of apiculture as a pursuit. During that period I have not met a dozen men who have amassed a competency through the culture of bees alone. Therefore, as a last word, to those who contemplate embarking in bee-keeping as a money-making venture, I desire to go on record as advising against it. Yet, as I have never been without bees during the past twenty-five years, I probably shall not be without an apiary while I remain in the flesh; for, as a side-issue, bees are profitable and afford a world of pleasure to one who, like myself, is very fond of them.—The American Bee-Keeper.

More Light on Swarming of Bees.

Under this heading, in the American Bee-keeper, Allen Latham gives an interesting account of experiments made by him. He believes that the size of frames has much to do with the encouragement or discouragement of swarming. Not merely the superficial contents of a frame, but the proper length and the proper depth must be had, and a frame may be too large as well as too small to secure best results in trying to keep down swarming. In the course of his experiments, he says:

"I next made frames 17 x 13 inside measure. I constructed last season sixteen of these hives. Seven frames were allowed for the brood chamber, and thirteen for the storage. Assuming not less than 10 pounds capacity per frame this hive allows a crop of 130 pounds to be stored in the absence of the bee-keeper."

Into these 16 hives I put colonies of all strains, using several colonies of Carniolan origin. I surely thought that the Carniolan would find this hive to suit its swarming desires, especially as I placed 10 of these hives

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on the highest hill in this vicinity, a hill which gets the sweeping winds from Long Island Sound. Before the middle of May this year every one of the colonies with Carniolan blood swarmed or tried to swarm, though the brood-chamber was in no case taken full possession of. Two other colonies, I know, (and how many others I do not know) also swarmed. Two months have passed since I have visited the apiary and I cannot say what has happened. But this I know, colonies which I should never expect to swarm in the smaller hives did swarm in these large hives.

"It is thus easy to see that frames can be too large for security against swarming as well as too small. I am not prepared as yet to state just what the proper size is nor whether one size will suit all races of bees. I am inclined to think that for the usual run of Italians eight frames of the $14\frac{1}{2} \times 11$ size just about fill the bill."

Concluding he says: "To sum up the preceding paragraph—any size of frame which tends to distort the normal shape of a brood-nest or which tends to unoccupied space below the brood is likely to encourage swarming."

"It is obvious from what I have outlined above that the Langstroth frame is a swarm-producing frame, and that frames less than 10 inches or more than 12 inches in depth are likely to lead to swarming unless preventive measures are taken. My home apiary frame is 10×12 inside measure. Only one of the 50 regulars swarmed this season, and it has been a bad season for swarming. To be sure, I had to apply preventive measures in two or three cases."

"My observations lead me to believe that swarm control can be looked for in the adoption of a frame of certain dimensions. Unless one does this he must adopt methods in his apiary to meet the swarming fever, methods which mean much labor and frequent loss of swarms, to say nothing of lessened honey-crop."

"Unless I now offer some reason why a certain size of frame tends to prevent swarming I fear that all which I have written may fail to convince. When a queen reaches the bottom and corners of a brood-frame simultaneously with the emergence of young bees in the centers of the frames she finds things to her own liking. The workers also are satisfied, for they will push right into the store-chamber instead of storing the first honey under the brood. With the $14\frac{1}{2} \times 11$ frame mentioned above I have repeatedly found the frames solid brood except an inch of honey above. With eight such frames the best queen is satisfied, and the bees once started in the store chamber rarely acquire the swarming fever."

Modification of Shaken Swarms.

Time was when the average bee-keeper was pleased to have his bees swarm, and it is not so many years since it was held by good authority that best results could be obtained by having each colony send out one, and only one, swarm. Now it is the study of most bee-keepers to limit swarming to the utmost. One of the ways of doing this is by shaken swarms, but gradually it is getting to be understood that these are not so reliable as at first supposed. F. Greiner has studied out a plan which, although requiring more work than the usual plan, he hopes to be more reliable, and that others may try it, he gives it in the American Bee-Keeper.

Preceding this it is interesting to hear from one of Mr. Greiner's intelligence some of the troubles attendant upon the ordinary shaking of swarms. Although he operates with sectional hives, it is not impossible to use the same plan with other hives.

After saying that with all the light upon shaking swarms given by Stachelhausen and others, the practise does not in every case turn out a complete success, Mr. Greiner continues:

"In particular can we notice a lack of energy in the brushed swarm as compared with the natural swarm. A large share of the brushed swarms, swarm out the next day or on one of the following days. With all clipped queens in the yard I have had a treated colony swarm

out three or four times, even continuing this till the sixth and seventh day after the making of the swarm. In some cases the hives were deserted, the bees going to some other hive in the apiary and the queens getting lost. By keeping entrance guards on all hives containing shaken swarms for one week has proved the most effective with me. But when we take into consideration the loss of time on all the colonies that do not at once adapt themselves to the new condition we cannot consider the brushed or shaken swarm a complete success."

"To be sure that swarms will not be cast we must make a careful examination of the hives every sixth day during the swarming period. Looking into the hives from the under side gives us a very good idea of what is going on; but we are apt to overlook such queen-cells as have only eggs deposited in them, even if we discover such as contain larvae. Often we find the lower edges of combs laced with embryo cells, which in itself is not a sure indication that swarming will occur. Many a colony starts there and never goes further. I have many such now nicely at work in the sections with all swarming tendencies died away (this is July 12), and even the embryo cells or cell-cups are removed. These colonies may be regarded as safe for the rest of the season; they need no more attention except providing room."

"If by some management all colonies could be induced to act likewise, the problem would be solved. Colonies headed by old queens give us the most trouble both as to contracting the swarm fever and swarming out after brushed swarms are made. This is a fact worth remembering."

"A brood-comb left in the hive or given to the brushed swarm is productive of swarming out and swarming from 12 to 15 days later. Contracting the hive unduly produces swarming out. Giving frames filled with comb foundation seems with me the best and surest way to hold the bees contentedly, and I have decided always to use full sheets of foundation hereafter in the brood-chamber. For immediate results, having young swarms on frames with starters is the best here, but in the long run we obtain better results and save labor by using the artificial midrib."

"I would rather have comb foundation than fully built-out combs. The drawing out of the embryo cells of the foundation has a beneficial influence upon our colony and excites to greater action. It is probably due to this, that the plan which I have worked out this season has worked so well with me so far. This plan has also in its favor that every colony of normal or average strength may be handled according to it with the same good result and with no risk to run of producing swarming out or swarming. I have so far practised it only with a sectional Hand hive and it is only a modified shaking or brushing plan, but not all combs being brushed at the same time. Two different operations are necessary to finish the job. If a colony occupies two sections then I split the brood-chamber horizontally about the time when swarming naturally begins and place a third section between. After a week I remove the upper one and insert another section super—the first one having been given previously. The third week the lower section of the brood-chamber is removed and replaced by one filled with sheets of foundation. Thus all brood is removed in course of two weeks. It was done so gradually that the colonies did not become discontented as seems to be the case under the regular, but rather heroic treatment, I had practised before. These colonies are surprising me by the manner of their filling supers."

"The plan may be altered according to seasons and varying conditions. For example, when I found that after giving the first section and after removing the first upper half of the original hive full of brood and honey, that no preparations for swarming were made in any way, not even embryo queen-cells being started, I left a few hives in just that shape, not removing the second half of the original brood-chamber nor increasing its size, yet no swarming has resulted and the work in the section supers is going on very nicely. However, I have not tested this plan long enough nor with enough colonies to prove its working in different seasons and under different conditions, and I give it for what it is worth, hoping others will help test it and possibly work out a system of management that will simplify the work and be a help to the fraternity."

Three Hundred Billion Bees at Work

That is the striking title of an illustrated article in Technical World Maga-

zine, written by Roy Crandall. On the authority of Dr. Phillips he gives 300,000,000,000 as the number of bees in the country, and after comparing the honey crop with some other crops, he says:

"It will thus be seen that in one year the bee-hives sent to market a product worth nearly as much as the barley crop; three times as much as the buckwheat crop; \$6,000,000 greater than the rye crop, and nearly \$9,000,000 greater than the rice crop. All of the rice and buckwheat grown on an aggregated area of 2,126 1-3 square miles did not reach the value of the honey by \$151,259."

Speaking of appreciating the great number of insects at work, he says:

"That is rather difficult, for three hundred billion stretches a long way beyond intelligent human comprehension. The human mind doesn't work well in anything mathematically greater than thousands."

"It is said that some bank tellers become so expert that they can count 200 coins a minute. If the most expert of all were started at the task of counting as many coins as there are bees in the hives, he could finish the task in 2,854 years; provided, of course, that he didn't become either hungry or sleepy, for that 200-a-minute pace would have to be maintained every minute of the day and night."

Although Mr. Crandall is an excellent writer, the article hardly bears testimony that he has spent many years in the apiary and become very familiar with bee-literature. He speaks of the worker as "he." He says that when the famine periods come the drone is set upon by the workers, stung to death, and his body kicked out of the hive. What proportion of the drones in a colony has any bee-keeper seen actually stung to death?

Some queens have been known to lay 4,000 eggs a day for a year; and a battle among bees is described as "occurring" "every now and then," such as not many bee-keepers have seen in a lifetime. A whole colony will suddenly decide "to loot the hive of an adjacent race." The fearful battle is vividly described, 50,000 on a side, and the writer gives a decidedly original touch by saying that when the robbers come off victorious there is sure to be a fight among themselves for the loot, until the survivors are "so few in number that their per capita supply of the captured honey is far more than they can consume."

In spite of these drawbacks, such an article, in a magazine so nicely gotten up, will help to make the public more interested in bees and their product.

Books for Bee-Keepers

Every bee-keeper should have a bee-book besides a bee-paper. On another page will be found all the best books offered—either at a price, postpaid, or as a premium. If you can not earn them as premiums for getting new subscriptions, it will pay you well to purchase one or more of them. You will find them of great value. There are so many things in the books that are needful to know, and that of course could not be told over and over again in the bee-papers. If a bee-keeper can afford only one, it would better be the book rather than the paper. But now that the American Bee Journal is only 75 cents a year, of course, no bee-keeper, however limited his apiary may be, can afford to be without its monthly visits.

American Bee Journal



Send Questions either to the office of the American Bee Journal or to
DR. C. C. MILLER, Marengo, Ill.
Dr. Miller does not answer Questions by mail.

Placing Stores for Wintering.

I have a colony of bees that has been working in 2 large brood-chambers all the season. At this date (Sept. 17), the brood is all in the lower story, and the combs of the upper story are practically full of unsealed honey. There is not, nor has there been, any bee-zine between stories. I wish to leave the honey in both stories for winter feed. Would you place the upper story under the brood, or leave it where it is? Iowa.

ANSWER.—Leave it where it is—probably. That's on the supposition that the colony is very strong, and before so very long will work its way into the upper story. With a weak colony, and lower combs well filled, it may be better to change.

Feeding Sugar Syrup for Winter—Paper Hive Protection in Winter.

1. We expect a late fall flow of honey from heartsease. I wish to take nearly all the honey and pollen from 200 colonies and feed sugar syrup. How late would you advise me to feed? Or I might feed 160 or 180 pounds of syrup at once and take all the honey from the other 100 colonies about Nov. 1, just before time to put them into the cellar, so they would have a flight or two. My idea is to feed by the 15th or 20th.

2. I gave my bees spring protection with tar paper and red rosin paper, and the 46 colonies covered with tar paper gave me just about twice the surplus honey that those 46 covered with red rosin paper gave me—a costly experiment. The bees were all in one apiary. Iowa.

ANSWERS.—1. There is no reason for any delay after the heartsease closes, so you will do well to feed immediately after that. Your idea of feeding the middle of October will work all right, but as heartsease will probably close in September you might as well be a little earlier.

2. If such a marked difference could be attributed to nothing else than the different kinds of protection it is quite important to know it.

Feeding Bees for Winter.

We have about 100 colonies of bees, and have secured no surplus, not having had any rain since early in May, and of course the bees could store no honey. Now how shall I proceed to carry bees through the winter in the best shape with least expense? When shall I begin feeding, as it is so dry now that they are into everything they can get at? And what shall I feed? My bees are in 8 frame Langstroth hives. Ohio.

ANSWER.—Feed best granulated sugar. If there is no prospect of further pasturage, you may feed at once, or any time up to say about 2 weeks before bees are likely to cease flight. If you feed at once, you can use sugar and water, half and half, or a little stronger, say 3 parts sugar to 2 parts water. If you feed late, have the syrup still stronger, 2 parts sugar to 1 of water, or even as strong as 5 parts sugar to 2 of water, either by weight or measure. No need to cook the feed, only to dissolve the sugar in the water, only if the syrup is strong it hastens the work of dissolving if hot water be used. Whatever you do, don't burn the feed, for burnt syrup is death to bees in winter. If you feed late there is an advantage in giving the feed hot; the bees take it more readily. The Miller feeder is probably the best thing you can use, but if you haven't that or some other good feeder you can use the crock-and-plate method.

Fumigating Comb Honey—Beeswax Instead of Honey.

1. How much bisulphide of carbon should I use to fumigate comb honey?
2. How long should the honey be exposed to the fumes of the bisulphide of carbon?
3. What is the best method of producing beeswax? I want beeswax instead of honey. New York.

ANSWERS.—1. I have never had any personal experience with bisulphide of carbon, for since it has come into use I have never had occasion to fumigate. With Italians or a good strain of hybrids you don't have to. It isn't the easiest thing to learn from others the right quantity to use. Root's "A B C" says: "The combs to be treated are placed in a toolbox or small room. A pint or a quart of the liquid, depending on the size of the enclosure, is then placed in an open vessel above the combs." Instruction from others has been something like this: "Pile up your combs to be treated 4 or 5 stories high, in live-bodies. Put on top a saucer containing 3 or 4 table-spoons of bisulphide, and cover closely." Probably it doesn't make much difference if you use too much.

2. Open up in about 24 hours.
3. So far as I have ever learned, those who make a business of producing wax rather than honey have done it by feeding back the honey, thinned, as fast as the bees built combs and stored it. But that was in places very far from market, where the honey would not pay for transportation and wax would. It is not likely you can make it pay in your region.

Shipping Comb Honey—Producing both Comb and Extracted.

1. What size shipping-cases are best to ship honey to a distant market, the 24-section or the 12-section case? If the 12-section size is used, will it sell for a better price, so as to repay for the extra cost in cases?

2. Is it advisable when shipping honey to weigh each case separately, and mark the case weight and honey weight on a label, or otherwise, on each case? or is that not needed?

3. When is the best time to ship comb honey?

4. Do you think it a good plan to work for both comb and extracted honey? That is, to have the weaker colonies produce extracted honey, while the stronger ones are producing comb honey?

5. This year, after having my comb-honey supers stored in the honey-house for about 4 weeks, I examined them and found that wax-moths had been working in nearly every super. Could there have been eggs from wax-moths stored in each super, or do they travel from one to the other?

6. Which is the best way to destroy them? Does fumigating with sulphur hurt the flavor of honey?

We had a good honey crop here this year. Iowa.

ANSWERS.—1. So far as concerns safety in shipping, there is probably little difference; the little there is being in favor of the smaller package. In some markets honey brings more in the larger cases. But I suppose some grocers might not have any preference, where they never sell by the case.

2. If you sell by weight, it is well to have at least the net weight on each case. The tendency seems nowadays toward selling by the case rather than by weight. Canadians call it selling by the dozen. Colorado State rules require that a 24-section case of No. 1 separated honey shall average 21 pounds net; half-separated, 22; and unseparated, 23.

3. Generally about as soon as it is ready.

In very cold weather combs are in danger of breaking.

4. That's a matter on which there is room for difference of opinion. Depends upon circumstances. Best for some; not best for others. Your market has something to do with it.

5. There were eggs in each super.

6. Bisulphide of carbon seems the favorite. You would hardly affect the flavor by sulphuring, but too much of it gives the capping a greenish color.

Wintering on Heartsease Honey.

My bees have done well in this part of Southern Kansas this season. There is no trouble in wintering bees here, as they have a flight nearly every week. I expect to move to South-central Iowa this fall. Will my bees winter successfully there on heartsease honey, or would it be better to extract the honey from the broodnest and feed sugar syrup? In 1905, some of my bees died of dysentery wintering on heartsease honey and not being able to take a flight for about 6 weeks on account of the severe weather. Kansas.

ANSWER.—It is possible that heartsease honey was not to blame for the trouble in 1905. Surely thousands of colonies have wintered on it, and it has not had the name of being bad for winter food. My bees wintered well last winter, and I think a good share of their honey was heartsease.

Late Queenless Colony.

I have 4 colonies of bees, and last spring I found one of them very weak and without a queen. I gave it a queen-cell from one of the other colonies, and now they have a fine queen and lots of honey for winter. One of my other colonies has no queen, and I find no queen-cell to transfer to them. If I had I think it would be too late anyway. What is the best thing I can do? The colony that is without a queen has lots of honey. I got 90 pounds from 3 colonies this season. The most I ever had from 3 colonies was 150 pounds. Please let me know what I should do with the colony without a queen this late in the season. PENNSYLVANIA.

ANSWER.—It is just possible that even thus late your colony might rear a queen if you should give it a frame containing very young brood, but a much better way would be to buy a queen for it from some one of the queen-breeders advertising this month, or last month, in the American Bee Journal.

Packing Bees for Wintering—Foul Brood and Supers.

1. How do you pack hives for the winter on the summer stands? Do you use sealed covers or enamel cloth over the top, or quilts under the covers?

2. If a colony having black or foul brood should store honey in the supers, comb or extracted, would it be safe to use the supers after the honey is extracted or disinfected in a solution of carbolic acid and rinsed in clean water the same as the hives, or should they be destroyed? PENNSYLVANIA.

ANSWERS.—1. My colonies are wintered in the cellar. If I were to winter them outdoors, I might try sealed covers and also quilts or cushions, but in either case I should strive to have abundant covering to make the top warm. A plain sealed cover, with nothing over it to keep it warm, would seem to be just the thing for the moisture of the colony to condense upon, and then drops of water would fall down upon the cluster; but if sufficient covering were over to keep the cover warm, there ought to be no such condensation.

2. So good an authority as Wm. McEvoy, the Canadian expert, says there is no need to disinfect hives that have lodged foul brood, so of course supers could be safely used again.

Colony Deserted Queen—Bees and Queen by Express.

1. I introduced an Italian queen into a colony of black bees and they accepted her all right, but the colony had been queenless so long that the bees were all dead but 10 or 15 about 2 weeks after I introduced her. They had plenty of feed, and I guarded them very carefully against robbers. Each morning I found a lot of dead bees in the bottom of

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the hive. They did not have any disease, but I found a few moth-worms in one of their combs. One afternoon I opened the hive at 1 o'clock and the queen and her few bees were all right. The same day at 4 o'clock I looked in again and the hive was empty. If all the bees left her, would she crawl out of the hive and the chickens eat her, or do you think it is possible that they had all gone in with another colony of bees? She was not in or near the hive, as I looked carefully.

2. When a colony of bees is sent by express, is the queen allowed to go free in among the bees, or is she placed in a cage among them? If she is free among them, would they not ball her. Please tell me just how they are shipped, as I want to buy a colony of Italians in the spring and would like to know before it is time to order them.

A MARYLANDER.

ANSWERS.—1. It is not easy to say for a certainty just what a queen with a few discouraged old bees might do. It is entirely possible that they may have gone in with a neighboring colony, where the queen would be killed. They might have gone in with a queenless colony, where the queen would be spared. If the queen's wings were whole she might have flown away from the bees. Not very likely that chickens ate her.

2. The queen is at liberty among the bees. Of course she belongs with those bees, just as a queen does in any colony or nucleus, and so there is no likelihood that the bees will ball her.

I don't know of anything in particular that you need to know in advance about a colony that is shipped. You will easily see what the fastenings are, and will easily undo them.

Beginning with Bees.

1. I have just started in the bee-business. I bought 6 colonies Aug. 15. Placing empty supers on them a day or two before bringing them home, I was told that they would fill the supers again with the fall flow of nectar. Must I remove the supers as soon as frost comes, or will they work any after frost? I was assured that there was plenty of honey in the hive to keep them through the winter, and that it would be best to remove the supers for the winter months. Our winters here are very open, and we have some very fragrant flowers in February that grow on bushes near the hazel bushes of Missouri, only these are not nut-bearing.

2. I was told that they would not swarm at this season of the year, but for a week past between 4 and 6 p. m., there has been a disturbance around the different hives, and a few flying high in the air. If any swarm went off I did not see them.

3. I do not know anything at all about the business. Will your book be best for me as a beginner, or the "A B C and X Y Z of Bee-Culture?" I am not able to buy both at present.

4. I have been told to keep plenty of salt near by for the bees, and they would use it themselves to kill the moths. I notice when I put salt for them, they begin using it right away, and it soon disappears. Although I was assured that there were no moths in my bees, but they said salt was good for them. I also

keep both salt and water, and water without salt, near by for them.

ARKANSAS.

ANSWERS.—1. Supers should be removed whenever the bees are done storing. They may stop storing in July, or they may store until well on in September, but are not likely to store after frost. To be sure, they may gather a little almost any time when they can fly, but they'll use it faster than they can gather.

2. It was probably the bees taking a play-spell, just flying for fun and for exercise.

3. If you can not have both, get the "A B C and X Y Z of Bee Culture."

4. I don't believe giving salt has anything to do with the moths.

Comb Honey Seeping Out.

I have been in the bee-business for 25 years, but in all that time I have not had anything happen with my bees or honey that I could not remedy. What the trouble is this year, I cannot comprehend. The sections are sealed and filled nicely, and still the honey seeps out all over the comb, and sections that have weighed a pound have leaked so much that there is hardly any honey in them at all. Some sections are all right on one side, and on the other side all the honey has seeped out. Also, there is something wrong with the colonies. From some the honey is all right, and from others, leaky. This is all spring honey that I refer to. The leaky honey tastes a little queer, and is very thin.

ILLINOIS.

ANSWER—I am utterly at a loss to say what is the trouble or to suggest a remedy, and will gladly yield the floor to any one who will help. It may not be a wild guess to say that some special bloom has yielded honey with an unusually strong affinity for water; but what flower? and how much would it help if we knew?



Genuine Gluers—Fine Season.

A queen reached me September 10, and I got her safely introduced. When I opened the hive, about a week ago, I found the entrance to the hive closed up with propolis, all but a few holes for the bees to pass in and out. I tried to cut out that gum, but found that I could do nothing with knife or chisel, so I took a clean hive, and put the bees into that, and then took a key-hole saw and sawed out the entrance. A week later, when I opened the hive I had put them in, I found it closed up again. If they are not the pure Caucasians, then I don't know where to find them. I use the 10-frame Langstroth hive with full-width entrance, and $\frac{3}{8}$ -inch deep. I don't know how many more times I will have to saw out that entrance.

We have had a fine season for honey. I have taken up to date a little over 4,100 pounds of honey, mostly extracted, from 24 colonies, spring count, and have increased to 41. They are still bringing in honey.

FRED BECHLY.

Searsboro, Iowa, Sept. 13.

Prefer Tobacco to Bee-Literature.

I have been trying to get at least one new subscriber for the American Bee Journal, but have failed in every instance. I asked at least 3 men who spend from \$10 to \$20 per year for tobacco, but I could not get them to spend 75 cents for something that would inform them. How strange! Ignorance may be bliss, but the less the better. I give away nearly all of my journals after I have read them.

I. M. NEWMAN.

Hewins, Kans., Sept. 3.

Bees Have Done Well.

Bees in this locality which have had tolerably good care have done very well this season so far. They are now working on buckwheat, which is yielding nectar this year.

I had 10 colonies in the spring, which increased to 18. They are mostly Italian, and are in 8 and 10 frame Heddon and Langstroth hives.

I have taken off some 450 pounds of surplus comb honey in $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ sections; also 250 pounds of extracted honey. The markets around here are pretty well supplied with honey now. I will hold the most of mine a while until there is a better demand.

WM. MARTIN.

Highland, Mich., Sept. 1.

Part of Apiary of Walter Goss.

I am sending a photograph of a part of my bee-yard in the apple orchard, taken August 12. The big boy is myself, and the little boy is Hubert Sink, 12 years old, my helper. I have 25 colonies. Fourteen are in Root's 10-frame hives, 3 are in divisible brood-chamber, and the rest are in home-made ones, but are the regular Langstroth dimensions. Most of the hives shown in the picture are home-made. I don't think it pays to make one's own hives when they can be ordered so cheap in the fall.

I contracted the bee-fever when a mere child, helping father with his bees in the old-fashioned way with his log-guns and box-hives, and at last I became so enthusiastic about bee-keeping that I couldn't rest satisfied until I knew more about the inside workings of the bee-hive. In 1902 I sent for a bee-book and bee-paper, and I now take care of the bees in an intelligent, up-to-date way. I have also been reading the American Bee Journal since October, 1902, and couldn't get along without it.

This has been my best year with bees. They commenced gathering honey from white clover May 20, and never lost a single day till the very last days of June. I have harvested and sold nearly 600 pounds of chunk honey. It was about all engaged before it was off the hives. I have never had enough to supply



APIARY OF WALTER GOSS, OF GOSPORT, IND.

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the home demand. The bees haven't gathered any surplus within the last 6 weeks—only for their own needs—and I think the fall flow will be light, although we can't tell yet.

I winter my bees on the summer stands packed in forest leaves, and they always come through with a strong force in the spring.

I want to write more about the honey-plants, the honey-flow, and the weather conditions in this vicinity, some time in the future.

WALTER GOSS.

Gosport, Ind., Aug. 22.

Honey Crop a Failure.

The honey crop is a failure here. I have not taken honey enough yet to pay for the feed given the bees last spring.

Leon, Iowa, August 25. EDWIN BEVINS.

Poor Honey Season.

We have had a very poor honey season here. It was too wet during May and June, and too dry during July.

(Dr.) J. F. VIGOR.

Pomona, Kans., Sept. 8.

Apiary of C. A. Mangus.

My apiary is located north of the city of Altoona. It is in the best location in the city



C. A. MANGUS AND APIARY, ALTOONA, PA.

limits. It numbers 27 colonies, all 3 and 5 banded Italians.

C. A. MANGUS.

Altoona, Pa.

No Fall Honey.

I received the September number of the Bee Journal. I am a reader, or was, of the American Bee-keeper. I regret to see it go out of print, but I welcome the American Bee Journal.

There is no fall honey-flow here. Our last supers are empty. July is our honey-month. White and sweet clover are our stand-by flowers, about 50 pounds per normal colonies of surplus honey. This alludes to comb honey. Extracted would go higher. I produce only comb honey. Brood-chambers are amply supplied.

It gives me much pleasure to look down the columns of the American Bee Journal and see bee-keeping put in practise, but I have this to say about those little stingers—they will never make friends with you.

D. HARTMAN.

Williamsburg, Kans., Sept. 20.

A Fair Crop of Honey.

We have harvested a fair crop of honey. This would have been a banner year for us, but the drouth, and also several light frosts in August, cut off the buckwheat flow, leaving us with no fall honey. But bees are going into winter quarters in fine condition.

GEO. H. REA.

Key, Ids. Pa., Sept. 19.

Hard to Start Sweet Clover.

I have been trying to get a start of sweet clover for 3 years, and had a good start of the white variety around my bee-yard, but the dry weather has killed it about all out. It is very dry here, so much so that the golden-rod is all drying up. The bees are not working on it as there is no nectar in it, I suppose. The bees are doing little or nothing for me this year as yet. I have every sort of hive, patent, movable frame, and Italian bees. All are very strong colonies.

R. B. PERRY.

Greenfield, Tenn., Sept. 20.

Honey Crop a Failure.

The honey crop here has been almost a failure. There was a little clover, no bass-wood and no buckwheat. Early promises did not fulfill.

G. M. DOOLITTLE.

Borodino, N. Y., Sept. 8.

A Beginner's Report.

I am just 16 years old. I started in the bee-business in February last with 2 colonies and now have 6, 3 of which are doing fine work in the supers. I have 10-frame Danzenbaker hives. The only objection to the Danzenbaker hive is the bottom-board. I prefer a solid board instead of so many pieces, as they warp so badly.

Today we had the first rain in nine weeks.

American Bee Journal Now 75c a Year.

On September 1, 1907, we placed the subscription price of the American Bee Journal at 50 cents a year. It was an experiment for us. We have given it a year's trial and are convinced that the kind of a journal that we are getting up each month can not be profitably maintained at so low a price as 50 cents. Besides, it is worth more than that if it is worth anything at all. No bee-paper has ever been successful at 50 cents a year. We have been giving every month more valuable bee-literature, we believe, than was ever given by any other monthly apiarian publication at even one dollar a year.

Bee-keepers are not cheap folks. They believe in the "live and let live" principle. There has been a fair crop of honey in most localities this year, and it will sell at a fair price if properly marketed. The cost of everything that goes into the making of the American Bee Journal is now higher than for years, and its 32 pages each month fairly teem with helpful, interesting information—so they tell us who ought to know. It costs a good deal to secure it and put it up in such attractive shape. The price should be one dollar a year, but beginning with September 1, 1908, we put it at 75 cents a year (3 years for \$2.00, or 5 years for \$3.00) in the United States and its possessions, also Mexico and Cuba (except in Chicago, where the postoffice department compels us to add 2 cents per copy for postage, making it \$1.00 per year). To Canada it will be 85 cents a year; to other foreign countries, such as England, Australia, etc., it will be \$1.00 a year. To South Africa and other countries not in the Universal Postal Union, it will be \$1.25 a year.

We believe that every one of our readers who appreciates a good bee-paper, will commend us for making the change from 50 cents to 75 cents—which on individual subscriptions is only "a quarter" a year more, or about 2 cents a month more—that's all.

We wish to thank all our readers for the interest they are taking in the American Bee Journal, and especially for securing new subscriptions. On another page we make some liberal offers for the work of getting new readers. We hope it will be kept up, and that we may have a large increase in our subscription list.

And now, wishing all our readers success in their undertakings, we are,

Faithfully yours,

GEORGE W. YORK & CO
Chicago, Ill., Sept. 1, 1908.

Connecticut Convention.

The 17th fall convention of the Connecticut Bee-keepers' Association will be held Friday, October 16, 1908, in Room 50, State Capitol, Hartford, beginning at 10:30 a. m. To all interested a cordial invitation to meet with us is extended. Matters of importance to progressive bee-keepers will be discussed by experts.

JAMES A. SMITH, Sec.
Hartford, Conn.

The heartsease and smartweed honey-flow has been on for 2 weeks, and it generally lasts from 6 weeks to 2 months.

I like the American Bee Journal.

E. CARLYLE GOLDSMITH.

Pond Creek, Okla., Sept. 4.

Pretty Good Year for Bees.

This year has been pretty good here for bees. I had one colony that stored 164 pounds of comb honey. But I had so many poor queens that didn't do anything at all.

J. E. POMEROY.

Boring, Oreg., Sept. 1.

Fair Season for Bees.

My bees so far have given about 50 pounds of comb honey to the colony. I get 20 cents in the home market. I am buying extracted honey to supply the local trade.

W. SAPPENFIELD.

Rockville, Ind., Sept. 5.

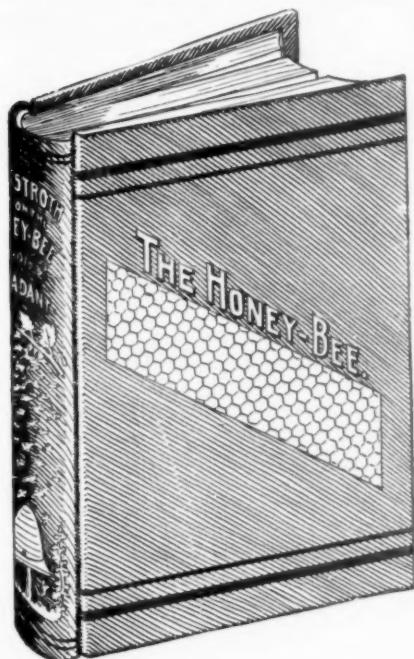
Apiarian Pictures

We would be glad to have those who can do so, send us pictures of bee-yards, or of anything else that would be of interest along the bee-keeping line.

Langstroth on the Honey-Bee

Revised by Dadant—Latest Edition

This is one of the standard books on bee-culture, and ought to be in the library of every bee-keeper. It is bound substantially in cloth and contains nearly 600 pages, being revised by that large, practical bee-keeper, so well-known to all the readers of the American Bee Journal—Mr. C. P. Dadant. Each subject is clearly and thoroughly explained,



so that by following the instructions of this book one cannot fail to be wonderfully helped on the way to success with bees.

The book we mail for \$1.20, or club it with the American Bee Journal for one year—both for \$1.70 or, we will mail it as a premium for sending us **FIVE NEW** subscribers to the Bee Journal for one year, with \$3.75.

This is a splendid chance to get a grand bee-book for a very little money or work. Address,

GEORGE W. YORK & CO.,

118 W. Jackson Blvd., CHICAGO, ILL.

Mention Bee Journal when writing.

Pennsylvania Convention.

The incomplete program for our next convention, to be held at York, Pa., Nov. 12 and 13, 1908, is as follows:

Thursday, 1:30 p. m., leading paper by Dr. E. F. Phillips.

"A General Discussion of Apiculture in the United States," Thursday evening.

Friday morning—Address by Prof. H. A. Surface, on "Hay and Honey Plants."

Friday afternoon—Probably an address by Dr. E. F. Phillips, on "The Treatment of Bee-Diseases."

A. F. SATTERTHWAIT.
Harrisburg, Pa.

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Every pen guaranteed full 14 Kt. solid Gold—cut on right hand may be had in either our standard black opaque pattern, or Non-breakable Transparent, as desired, either in plain or engraved finish, as preferred.

You may try this pen a week, if you do not find it as represented, a better article than you can receive for twice the price anywhere in any other make, if not entirely satisfactory in every respect return it and we will send you \$1.00 for it.

On left is our famous and Popular Red Gem Ink Pencil, a complete leak proof triumph, may be carried in any position in pocket or shopping bag, writes at any angle at first touch. Eridium (spring) feed, Iridium point, polished vulcanized rubber case, terra cotta finish. Retail everywhere for \$2.50. Agents wanted. Write for terms. Write now "test you forget." Address

Laughlin Mfg. Co.

385 Majestic Bldg.,
Detroit, Mich.

Mention Bee Journal when writing.

A Dishonest Queen-Breeder

Mr. Leslie C. Stewart sent a \$1.80 order for queens to Wm. McKnight, of Elamville, Ala., early in the season. But he never received the queens, nor the return of his money. If others of our subscribers have been treated in a similar way by McKnight, who advertised queens for sale through the American Bee Journal, we should like to know it. We have no use for fraudulent or dishonest advertisers, and whenever we have been imposed upon we want to find it out, so as to give them a free advertisement like we are here giving McKnight.

An Invitation to Readers

As the time of longer evenings is again arriving, we would like to invite our readers to send in their reports of the season of 1908 with the bees.

It may be, also, that some have been trying experiments, or have had some things to develop that would be of interest to all. If so, we would like to have such write out their experiences

for publication, and send them in. No doubt what you have read in the American Bee Journal has been a great help to you, so why not you add your mite to the general fund of information about bees?

Bees Visiting Different Flowers on Same Trip

It is generally understood that when a bee goes afield it does not visit promiscuously different kinds of flowers, but if it begins on clover it sticks to clover throughout its trip, and similarly of other flowers. The question having been raised in the British Bee Journal whether there might be exceptions to this rule, Dr. C. C. Miller wrote that journal as follows:

"It so happens that I can help just a little to settle the question raised by your correspondent, S. Jordan. Years ago I was sitting idly watching a bee at work on the flowers in front of the house, when I was greatly astonished to see it fly from one flower to another of an entirely different kind. After working a short time on this, it returned to the first kind, and later made the change again. At this distance in time I can give no particulars as to circumstances. That is the only observation of the kind made by me in the course of 47 years; but it is quite possible that to a limited extent the same thing is going on all the while.

FOR SALE

2000 lbs. Fancy Extracted Honey, clover and a little basswood mixed; thoroughly ripened on the hives, and is thick, rich and delicate in flavor. Put up in new 60-lb. cans, 2 in one case, cases iron-bound. Price, 9 cents per lb. Sample 10 cents.

JOS. HANKE, - Port Washington, Wis.
Mention Bee Journal when writing.



How to Get a Delicious Apple & Banner Grape Tree & Vine Free

THE FRUIT-GROWER

Fill in Coupon below and get

three months, Free and Our Offer to give away 25 Superb New Fruits. Handsomest farm paper published, interesting and helpful, even if you have only a few trees or plants. New fruits are finest ever introduced and would cost \$1.00 at nursery. Both perfectly hardy. Delicious and high as \$6 bushel. Grapes are just grand. One of the Three handsome FREE trial copies will be

Our Homeseekers Edition

telling about wonderful new fruit districts in Northwest, West and Southwest. Our editor personally visited these sections and tells honestly and vividly all about them. This number alone worth hundreds of dollars to those seeking new and profitable home lands. Write now to The Fruit-Grower, Saint Joseph, Missouri.

The Fruit-Grower, Box 910, St. Joseph, Mo.
Send paper 3 months FREE and tell how to get New Fruits without cost, after which I will accept offer or notify you to stop the paper.

Name _____

Town _____ State _____

FASHION BOOK FREE!

I want to send you my handsome new book showing hundreds of latest styles with illustrated lessons on cutting and dressmaking. I will agree to sell you all the patterns you want for five cts. each. They are the same patterns you have always paid 10c & 15c for at the stores, made by the same people, and correct in every detail.

HOW I DO IT.

I publish the **FARMER'S CALL**, a weekly paper for every member of the family. An especially interesting feature each week are the children's letters; and the Woman's Department is unusually strong and instructive. Among the special features for Women folks, is its fashions in which I show the **5c patterns**. Let me help you to save money.

MY SPECIAL OFFER

Send me 25c and I will send you the **Farmer's Call** every week (over 1000 pages) for one year and will send my big Fashion Book to you free. I also agree to sell you any pattern you want thereafter for 5c. I can sell them for 10c because I buy them by the thousand and don't make any profit. I don't want the profit. I want your subscription to the **FARMER'S CALL**. You will save many times the cost of my offer in a year. **WRITE TO-DAY!**
JOHN M. STAHL, Dept. QUINCY, ILL.



IF YOU WANT THE BEE-BOOK

That covers the whole Apicultural Field more completely than any other published, send \$1.20 to

Prof. A. J. Cook, Claremont, Cal.,

—FOR HIS—

"BEE-KEEPER'S GUIDE"

Liberal Discounts to the Trade.

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THE JOURNAL OF
ECONOMIC ENTOMOLOGY

Has the latest report of all the best work in practical entomology. Articles upon apiculture by national authorities appear in it. If you wish the best entomological journal for the practical man, subscribe for it, \$2 a year.

E. DWIGHT SANDERSON, Business Mgr., DURHAM, N. H.

Our New
Headquarters

We have moved our business from Redford to Lansing, and are now equipped to supply you with "**Root Quality**" Goods to the very best advantage to you. We have a **Complete Stock**, and ours is the **best shipping point in the State**. Address your letters, and ship **Beeswax** to us here.

M. H. HUNT & SON,
Lansing, Michigan

Mention Bee Journal when writing.

Honey as a Health-Food.—This is a 16-page honey-pamphlet intended to help increase the demand for honey. The first part of it contains a short article on "Honey as Food," written by Dr. C. C. Miller. It tells where to keep honey, how to liquefy it, etc. The last part is devoted to "Honey-Cooking Recipes" and "Remedies Using Honey." It should be widely circulated by those selling honey. The more the people are educated on the value and uses of honey, the more honey they will buy.

Prices, prepaid—Sample copy for a 2-cent stamp; 50 copies for 70 cents; 100 for \$1.25; 250 for \$2.25; 500 for \$4.00; or 1000 for \$7.50. Your business card printed free at the bottom of front page on all orders for 100 or more copies. Send all orders to the office of the American Bee Journal.

"Forty Years
Among the Bees"

By Dr. C. C. Miller

One of the Best-Known Honey-Producers in all the
World

THIS book of over 340 pages tells just how Dr. Miller manages his apiaries to produce the most honey, which, in turn, brings the most

money. Dr. Miller has been "at it" some 45 years, and so is competent to tell others the best way to be successful with bees. In 1903 his crop of comb honey was over 18,000 pounds, and he is not located in the best honey-producing part of the United States, either—Northwestern Illinois.

we will mail you the book **free** as a premium. Every bee-keeper ought to have both the book and the Bee Journal, if not already possessors of them.

As Dr. Miller gets a royalty on his book—so many cents on each copy sold—every bee-keeper who buys it is thus helping a little to repay him for his effort to lead others to success through his writings on bee-culture.

As we have a good stock of these books on hand, we can

fill all orders by return mail. This is the time of year to read up on bee-keeping. Better send us your order at once for Dr. Miller's book, and study it carefully so as to make the most of the bee-season. Address,

GEORGE W. YORK & CO., 118 W. JACKSON BLVD. CHICAGO, ILL.

Tennessee-Bred Queens

All from extra-select mothers, Davis' Best, and the best money can buy

3-band and Golden Italians bred $3\frac{3}{4}$ miles apart, Carniolans 5, Caucasians 7 miles away

THREE-BAND AND GOLDEN ITALIANS

| | November 1st to July 1st | | | July 1st to Nov. 1st | | | BREEDERS | |
|-----------------|---|--------|--------|----------------------|---------|---------|------------------|---------|
| | 1 | 6 | 12 | 1 | 6 | 12 | | |
| Untested | \$1.00 | \$5.00 | \$9.00 | \$.75 | \$ 4.00 | \$ 7.50 | Straight 5-band | \$10.00 |
| Select Untested | 1.25 | 6.50 | 12.00 | 1.00 | 5.00 | 9.00 | Select Golden | 4.00 |
| Tested | 1.75 | 9.00 | 17.00 | 1.50 | 8.00 | 15.00 | Select 3-band | 4.00 |
| Select Tested | 2.50 | 13.50 | 25.00 | 2.00 | 10.00 | 18.00 | Select Caucasian | 5.00 |
| Untested | Caucasian, \$1.25 each; 6 for \$7.00; 12 for \$12.00. | | | | | | | |

Nuclei, without queens: 1-frame, \$2.50; 2-frame \$3.50; 3-frame \$4.50. 1 Full Colony, 8-frame \$3.00.

Select the queen wanted and add to the above prices.

NOTE

I have transferred to my son, Benj. G. Davis, my straight 5-band and Golden department, and in order to receive the promptest attention, all correspondence for these should be sent direct to him. He practically grew up in my queen yards, rears queens by my methods, has had charge of this department for years, and understands his business. No bee-disease.

JOHN M. DAVIS, Spring Hill, TENNESSEE, U. S. A.

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American Bee Journal

We will Buy and
Sell

HONEY

of the different grades and kinds. If you have any to dispose of, or if you intend to buy, correspond with us.

We are always in the market for

Beeswax

at highest market prices.

Hildreth & Segelken

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FRIEND BEE-KEEPER—We are prepared to fill your orders for **Sections**. A large stock on hand. Also a **Full Line of Bee-Supplies**. We make prompt shipments.

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IOWA—J. W. Bittenbender, Knoxville, Gregory & Son, Ottumwa.
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MICHIGAN—Lengst & Koenig, 127 South 13th St., Saginaw, E. S. S. D. Buell, Union City.
NEBRASKA—Collier Bee-Supply Co., Fairbury.
CANADA—N. H. Smith, Tilbury, Ont.

ARIZONA—H. W. Ryder, Phoenix.
MINNESOTA—Northwestern Bee-Supply Co., Harmony.
ILLINOIS—D. L. Durham, Kankakee.
OHIO—F. M. Hollowell, Harrison.
TEXAS—White Mfg. Co., Blossom.
WISCONSIN—S. W. Hines Mercantile Co., Cumberland.
J. Goheli, Glenwood.

HAND-MADE SMOKERS

Extracts from Catalogs—1907:

Chas. Dadant & Son, Hamilton, Ill.—This is the Smoker we recommend above all others.

G. B. Lewis Co., Watertown, Wis.—We have sold these Smokers for a good many years and never received a single complaint.

A. I. Root Co., Medina, Ohio.—The cone fits inside of the cup so that the liquid creosote runs down inside of the smoker.

All Bingham Smokers are stamped on the tin, "Patented 1878, 1892, and 1903," and have all the new improvements.

Smoke Engine—largest smoker made.....\$1.50—4 inch stove

Doctor—cheapest made to use.....1.10—3½ "

Conqueror—right for most apiaries.....1.00—3 "

Large—lasts longer than any other......90—2½ "

Little Wonder—as its name implies......65—2 "

The above prices deliver Smoker at your post-office free. We send circular if requested.

Original Bingham & Hetherington Uncapping-Knife.

T. F. BINGHAM, Farwell, Mich

Patented May 20, 1879.

BEST ON EARTH.



Brother Bee-Man

How about increase this fall? I have the Queens, and can ship promptly, **Italians, Carniolans, Banats, and Goldens**—the best of any race that money can buy. If you try a Banat this year you will want more next year. My Carniolans and Banats won First Prize last year at

the International Fair at San Antonio. Untested Queens, 75 cts. each; \$8.00 per doz. Choice Tested Queens, \$1.25 each; \$12.00 per doz. Choice Breeders, \$3.00 each. **Circular free.**

GRANT ANDERSON, Sabinal, Texas

Headquarters National Bee-Keepers Ass'n, Oct. 13, 14, 15, 1908.

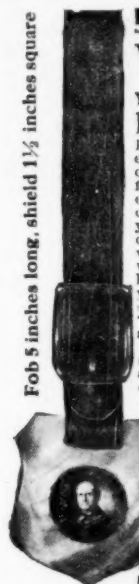
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Only First Class Hotel in the City overlooking the Beautiful Detroit River.

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Handsome Campaign Badge you have ever seen. You may have it FREE with our compliments. This fob is made of a fine grade of seal grained Russia leather, nickel-plated buckle, beautiful mother-of-pearl shield, containing a photo of your favorite candidate, either Bryan or Taft. It is guaranteed to be just as we describe it and you will be proud to wear it. We are giving away these handsome fobs to get acquainted with you and to get you acquainted with our splendid and instructive farm paper, "FARM AND STOCK," an up-to-date magazine devoted mainly to corn and live stock. The Watch Fob and a three month trial subscription given you absolutely free on receipt of 10 cents in coin or stamps to pay for mailing. We will also send you our liberal proposition whereby you can secure other handsome premiums free by giving away several of these fobs to your neighbors. You are sure to be delighted with both fob and paper, so send 10c at once while they last to

FARM AND STOCK
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For sale. Amber, Buckwheat and No. 2 White Comb, at \$2.75 per case of 24 sections; in 25-case lots 5 percent discount. Nice, thick, well-ripened light amber (¾ being clover) at 8 cents per pound, 2 60-pound cans to case. Bees and Queens in season.

Quirin-The-Queen-Breeder,
Bellevue, Ohio

Mention Bee Journal when writing.

QUEENS

Improved red-clover Italians. Select untested.

75c each. Safe arrival guaranteed. 8A3t

E. D. SIPPLE, Williamstown, Ky.

FOR SALE 1908 crop of White Clover Honey, all extracted from capped combs. A strictly fancy table honey that will please. Price, 10 cts. Sample free. Put up in 60-lb. cans either square or round. **WARREN H. WINCH, Hopkinton, Iowa**

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5A6t

American Bee Journal

Now Ready

The 97th edition of our catalog is now ready. If you have not received a copy and are ready to place an order for any supplies write for a copy. Our mailing list has over 400,000 names, so time is required to get the entire edition mailed. We expect this so any one may understand why a catalog may not reach him early.

The A B C of Bee Culture

When we announced the completion of the new edition late in 1907 there was a good deal of satisfaction to notice the big bunch of orders on hand, although we did regret the unavoidable delay in getting the books to some customers who had waited patiently for months. Over two thousand copies of this edition have already been sent out. We believe all urgent orders have been filled. We felt that the change of price to \$1.50 postpaid might cause a little slackening in the demand. Not so, however, for in all our experience the orders never came faster.

We have also of the English edition a half leather at \$2.00 and full leather at \$2.50, postpaid.

GERMAN EDITION, A B C der Bienenzucht in paper covers, \$2.00. Cloth-bound at \$2.50, postpaid, to any country.

FRENCH EDITION, A B C de L'Apiculture, cloth-bound, at \$2.00, postpaid, to any country.

Gleanings in Bee Culture

If you haven't seen a late copy of Gleanings you can't tell from any brief description how really magnificent it is. There are many valuable departments, and our subscribers just at this season of the year are telling how much they appreciate the paper.

Each issue is very fully illustrated. The covers are done by the finest engravers in Chicago, and our writers are the best in the land. Besides dozens of writers of prominence whose names we can't even mention for lack of space, we have such men as Dr. E. F. Phillips, U. S. Dept. of Agriculture; Dr. Edward F. Bigelow, Associate Editor St. Nicholas; F. Dundas Todd, former Editor Photo-Beacon; Allen Latham, Connecticut, etc.

A trial of six months (12 numbers) costs 25c. If in addition to your own subscription you secure others for six months keep 10c on each one for your trouble. A liberal cash commission to those who do canvassing for us.

Gasoline Engines and Power

Honey Extractors

For large apiaries, or where the honey comes with a rush and labor is scarce, you should investigate our power machines. A circular of these will be sent on request.

THE A. I. ROOT COMPANY, MEDINA, OHIO

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If you want Bee-Supplies or Berry Boxes quick, send to McCarty. Large Stock. Beeswax wanted. You can use any first-class catalog to order from. 6Atf

W. J. McCARTY, Emmetsburg, Iowa.

BEE-SUPPLIES. 40-page catalog free. Brimful of the latest make of hives, etc. Our supplies will please you in every way. Prices are right. We can make prompt shipments as we carry a full line of A. I. Root Co.'s supplies in stock. Don't fail to write us if you are in need of supplies. SATf

JOHN NEBEL & SON SUPPLY CO., High Hill, Montg. Co., Mo.
Mention Bee Journal when writing.

What They Say
"Your honey can't be beat."
—E. D. TAYLOR, N. A., Mich.
"Your honey certainly has the finest flavor of any I ever tasted."
—MRS. Z. SCHAAD, N. R., Mich.
"Enclosed find check for \$36, paying for last three cases of honey. I hope you won't dispose of all this honey at once, as I may want more later on. Had I known of it sooner, I would not have ordered some that is now coming and which will deplete my bank account to pay for, as I would rather have yours."
—E. W. PEIRCE, Zanesville, Ohio.

If you want some honey that will make you smile every time you taste it—honey you will be proud to set before your friends, or honey for your fancy bottling trade—send your order to **Jay North**. He has the genuine article; it is put up in new 60-lb. cans at 8¢ per pound. Sample free.

JAY NORTH, North Adams, Mich.

REASONS FOR THE PRICE OF MY RASPBERRY HONEY

I ask 10 cents a pound for my raspberry honey. This is slightly above the market price, but there are reasons.

In the first place, very little raspberry honey is produced. It is a novelty—something out of the ordinary—like orange-blossom honey, for instance.

In addition, it is of very superior quality; so much so that it was awarded the gold medal in competition with other honeys, at the Jamestown Exposition. It has a flavor of the wild, red raspberry of the woods.

Another most important reason why I should get a good price for my honey, is the manner in which it is produced. It is left on the hives for weeks after it is sealed over, and thus acquires that finish, that smooth, oily richness, that thick, rich deliciousness that can be obtained in no other way.

It costs more to produce such honey, there

is not so much of it, and it is worth more than the ordinary honey; just as the big Northern Spy apples, streaked with crimson and filled with juicy spiciness, are worth more than ordinary fruit.

As a finishing touch, the honey is put up in bright, new, 60-pound cans, securely boxed, and the boxes bound with iron so that they will bear shipment; in fact, I will guarantee safe arrival in perfect condition.

For a single 60-pound can the price is \$6.25; for two cans in a case (120 pounds) the price is \$12.00 a case, regardless of the number of cases that are taken.

If you are not acquainted with this honey, send me 10 cents and I'll mail you a generous sample, and the 10c may apply on the first order that you send.

W. Z. HUTCHINSON, Flint, Mich

BARNES' Foot-Power Machinery



Read what J. I. PARENT, of Charleston, N. Y., says: "We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-in. cap, 100 honey-racks, 500 brood-frames, 2,000 honey-boxes, and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make, and we expect to do it with this Saw. It will do all you say it will." Catalog and price-list free.

Address, **W. F. & JOHN BARNES**, 295 Ruby St., Rockford, Ill.

Mention Bee Journal when writing.

Engravings For Sale

We are accumulating quite a stock of engravings that have been used in the American Bee Journal. No doubt many of them could be used again by bee-keepers in their local newspapers, on their stationery, or in other ways. Also, if we can sell some of them it would help us to pay for others that we are constantly having made and using in our columns. If there is any of our engravings that any one would like to have, just let us know and we will quote a very low price, postpaid. Address,

GEORGE W. YORK & CO.

CHICAGO, ILL.

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American Bee Journal

For Over

Twenty-Five Years

our make of goods have been acknowledged to be in the lead as regards **Workmanship and Material.**

Our **Air-Spaced Hive** is a most excellent winter hive, and convenient for summer management as the single-walled. Same inside dimensions as regular Dovetailed Hives; all inside material interchangeable with Dovetailed Hives.

We manufacture a full line of **Bee-Keepers' Supplies.**

Fall and winter discounts:—
Sept., 7 per ct.; Oct., 6 per ct.;
Nov., 5 per ct.; Dec., 4 per ct.;
Jan., 3 per ct.; Feb., 2 per ct.;
Mar., 1 per ct. Catalog free.

W. T. FALCONER MFG., CO.
Jamesstown, N. Y.

Mention Bee Journal when writing.

Honey and Beeswax

CHICAGO, Sept. 22.—Usually at this time we have quite a demand for honey, but such is not the fact at this writing. The yield of honey being good in this neighborhood, people are stocking their friends and acquaintances and their local stores with honey, and they are also visiting Chicago and bringing honey with them, which they are placing with the retailers, because of their inability to sell it to dealers. This condition has a tendency to demoralize prices, and we now quote A No. 1 to fancy comb at 13 to 14c, with other grades from 1 to 3c per pound less. White extracted 7 to 8c, with some of the Western grades at 6 1-2c; amber grades 6c, with the dark one-half cent less. Beeswax is steady and in good demand at 30c.

R. A. BURNETT & Co.

INDIANAPOLIS, Sept. 22.—There seems to be a good demand for best grades of both comb and extracted honey. Prices are still irregular, but producers are offering fancy white comb at 12 1/2c; No. 1 white at 12c; and best extracted, in 5-gallon cans, at 7c. Almost no demand for amber grades. Beeswax is steady at 28c spot cash.

WALTER S. POWDER.

LOS ANGELES, Sept. 21.—Honey quotations are as follows: Light amber, 5c; white, 5 1-2c; water-white, 6 1-2c. Beeswax, 23c. In many locations the crop has been a failure. No white honey to be had at any price.

H. J. MERCER.

DENVER, Sept. 25.—Demand for comb honey in carload lots is fairly good, but local trade on same is light, which is mainly due to the large amount of fresh fruit in the market at present. We are quoting our local market as follows: No. 1 white, per case of 24 sections, \$3.15; No. 1 light amber, \$3.00; No. 2, \$2.85. Strained and amber extracted honey, 6 3/4 to 7 1/4c; light amber extracted 7 1-2 to 8 1-2c; white alfalfa, 8 1-2c. We pay 24c per pound for clean yellow beeswax delivered here.

THE COLO. HONEY PRODUCERS' ASS'N.

Headquarters for Bee-Supplies

ROOT'S GOODS

Honey Wanted

Fancy white clover Extracted. State how it is put up, and the price expected, delivered Cincinnati.

C. H. W. WEBER CINCINNATI OHIO

Office and Salesrooms, 2146-48 Central Ave. Warehouses, Freeman and Central Aves.

At Root's Factory Prices

KANSAS CITY, Mo., Sept. 23.—The best comb honey in 24-section cases has been selling at \$3.25 per case right along, but with several cars of Western stock due this week we look for it to go to \$3.00 per case, or around that figure; amber will probably move at \$2.75. Best extracted is bringing 8c.

C. C. CLEMONS & Co.

CINCINNATI, Sept. 22.—The demand for honey has improved considerably, but no high prices have as yet been obtained. We quote: No. 1 white comb honey at 14c; off grades are not wanted at any price. White clover extracted honey sells at 8 to 8 1-2c; amber in barrels at 5 1-2 to 6c. Beeswax is selling slowly at 31c.

C. H. W. WEBER.

PHILADELPHIA, Sept. 21.—The Philadelphia market is well supplied with local honey, fall crop having been gathered at this time. It is one of the largest we have had for years. Outside of the Eastern States later reports show the crop is much below the first reports. This condition makes our market very unsettled. We quote: Fancy comb honey, 15 to 16c; No. 1, 14 to 15c; amber, 12 to 13c. Extracted, white, 7 to 8c; amber, 6 to 7c. Beeswax, 28c.

WM. A. SELSER.

ZANESVILLE, OHIO, Sept. 22.—The honey market is practically unchanged since last report. While there is little demand for extracted, comb is moving as rapidly as could be expected at this season of the year, especially in view of the general depression. Producers seem to be holding for higher prices than the condition of the market warrants. Strictly No. 1 to fancy white comb should bring about 13 to 14c on arrival, the wholesale prices being arbitrary as yet. Good yellow beeswax is worth 29c first hand.

EDMUND W. PEIRCE.

NEW YORK, Sept. 21.—Receipts of comb honey are now quite heavy from New York State and Pennsylvania mainly. Demand is fairly good, especially for No. 1 and fancy white, also for fancy buckwheat. Lower grades not in as good demand. We quote fancy white, 15c; No. 1 from 13 to 14c; No. 2 at 12c, and dark from 10 to 11c. The demand for extracted is improving, especially for Californian, which on account of the short crop is ruling rather high in price. We quote California white sage at 9c; light amber at 8c; amber at 7c; white clover, 8 to 8 1-2c; light amber, 7 to 7 1-2c; and dark, 6 1-2c. Very little doing in beeswax; plenty of supply and market easy at 28 to 29c.

HILDRETH & SEGELKEN.

ITALIAN BEES AND QUEENS, SUPPLIES
Standard Goods. Ask for Circulars.

ALISO APIARY, El Toro, Orange Co., Calif.

"The Honey-Money Stories."

This is a 64-page-and-cover booklet, 5 1/4 x 8 1/2 inches in size, printed on enameled paper. The cover has a picture of a section of comb honey, 3 1/2 inches square, the comb being in gold-bronze, which gives it a very attractive appearance. Then on the gold-bronze comb are printed these words: "From Honey to Health, and from Health to Money."

It contains a variety of short, bright stories interspersed with facts and interesting items about honey and its use. The manufactured comb honey misrepresentation is contradicted in two items, each occupying a full page, but in different parts of the booklet. It has in all 31 halftone illustrations, nearly all of them being of apiaries or apiarian scenes. It also contains 3 bee-songs, namely, "The Hum of the Bees in the Apple-Tree Bloom," "Buckwheat Cakes and Honey," and "The Bee-Keeper's Lullaby." The songs alone ought to be worth more than the price of the booklet.

It should be placed in the hands of everybody not familiar with the food-value of honey, for its main object is to interest people in honey as a daily table article. The stories and items are all so short and helpful, and the pictures so beautiful, that it likely will be kept by any one who is so fortunate as to get a copy of it. Its postpaid price is only 25 cents, but the health-value of its contents would run up into dollars.

We believe it would be a great help to create a more general demand for honey. Its retail price is 25 cents, but we will mail a single copy as a sample for only 10 cents; 5 copies for 75 cents; or 10 copies for \$1.25. With the American Bee Journal one year—both for 60 cents. Send all orders to George W. York & Co., 118 W. Jackson, Chicago, Ill.

Land For Sale

at \$15 to \$40 an acre, in the Uvalde Honey-Belt, by The Asherton Land & Townsite Co. E. A. Armstrong, Agt., Carrizo Springs, Tex.

5000 Lbs. Clover and Basswood Honey—nice, well-ripened—in 5-gal., round, half-handled cans, \$5.50 per can here. Sample free.

Mathilde Candler, Cassville, Wis. 103461

FOR SALE A fancy article of Extracted Basswood Honey, left on the hives 5 weeks after harvest. 1 case of 2 5-gal. cans, \$9.60.

Gustave Gross, Lake Mills, Wis.

HONEY

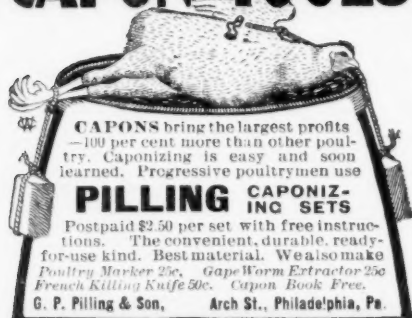
We have on hand a fine lot of **New Extracted White Clover Honey** which is excellent, and which we offer at the following prices:

| | |
|-------------------------------|-------------------|
| Barrels (about 550 lbs. each) | - - 8c per pound. |
| Ten 60-pound cans or more, | - - 8½c " |
| Two 60-pound cans or more, | - - 9c " |
| One 60-pound can, | - - 10c " |
| Six 10-pound cans or more, | - - \$1.15 each. |
| Twelve 5-pound cans or more, | - - 60c " |

After September 20th we can furnish **Amber Fall Honey** at the same prices as above. **Sample Free.**

DADANT & SONS, Hamilton, Illinois

CAPON TOOLS



Mention Bee Journal when writing.

HONEY AND BEESWAX

When consigning, buying, or selling, consult

R. A. BURNETT & CO.

199 South Water St. Chicago, Ill.

Mention Bee Journal when writing.

WANTED:—We are in the market for No. 1 White Extracted Honey in any quantity. Correspondence solicited. State kind, quantity and price asked.

We also have for sale 60-pound Honey Cans, 2 cans in case. Both cans and cases in Al condition, at 30c per case. 8A3t

Michigan White Clover Honey Co.

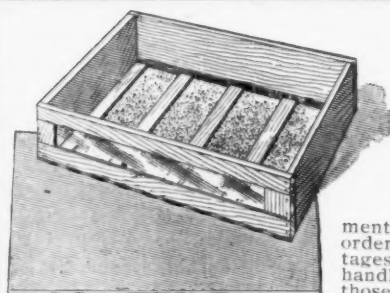
31-33 Griswold St., Detroit, Mich.

Mention Bee Journal when writing.

Getting New Subscribers

This should be a good time to get new subscribers for the American Bee Journal. On another page we offer a number of premiums for such work. We hope that as many of our present readers as possible will help us to increase our subscription list. The more

intelligent bee-keepers are, the better it will be for all interested in the business. And much of that intelligence is secured by reading. We will be pleased to send free sample copies on request. Shall we not be favored with a large increase of new subscriptions during the next 2 or 3 months?



Shipping-Cases

For any number or size of Sections desired. These cases are made of fine white bass-wood and the workmanship is first class. Owing to the shortage of the honey crop last year, we have a good stock on hand and can make immediate shipment.

Twelve-inch case with follower to hold 24, or 8-inch case with follower to hold 12 bee-way sections, shipped when no size is mentioned. All cases single-tier unless otherwise ordered. The double-tier case has many advantages: lighter, stronger, shows more sections, is handled and stored easier. Further particulars to those interested.

Honey-Packages in Tin

Standard packages for storing and shipping extracted honey. Less chance for leakage or taint from wood; being square they economize on space. Five-gallon cans boxed two or one in a box, gallon cans 10, and half-gallon cans 12 to the box. Five, one and half-gallon cans not boxed if desired. Prices on application for any quantity.

Place your order for the number of Cases and Honey Packages wanted, and we will guarantee prices and prompt shipment.

Minnesota Bee Supply Company

152 Nicollet Island, Minneapolis, Minn.

